WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Monday, March 15, 2004

Hide?	Set Name	Query	Hit Count
		DB=USPT,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ	
☐	L6	(L4 or l3) and (tumor$7 or anti$1tumorog$5 or antitumorog$5 or metas$7 or anti$1metas$7 or carcinog$5 or anti$1carcinogen$5)	14
☐	L5	(L4 or l3) and (anti$1cancer$5 or anti$1tumour$5 or anti$1tumour$5 or anti$1tumor$7 or anti$1tumor$7 or cancer$5 or neoplas$9 or anti$1neoplas$7)	15
☐	L4	L1 and methanol$2	128
☐	L3	L2 and (methanol$2)	9
☐	L2	(MILFOIL STAUNCH WEED OR NOSEBLEED OR SOLDIER$2 HERB OR CARPENTER$2WORT OR THOUSAND WEED OR WOUND$1WORT OR BLOOD$1WORT OR BOOMADARAN OR KNIGHT$2 MILFOIL)	169
☐	L1	((achille$1) and (millefoli$2)) or yarrow	981

END OF SEARCH HISTORY

T.E.K.* P.A.D. Plant Entry

Scientific Name: Achillea millefolium ssp.sudecita

Common Name(s): Yarrow

Select a medical use: <None>

If a medical use is selected, it will be included in any of the search options below

Search options:

- **T.E.K.* P.A.D.** entries for Scientific Name , Common Name(s) or Both
- **USPTO Patent Database** for **Achillea millefolium ssp.sudecita** **
 Patent Grants (since 1996) **or**
 Patent Applications (since 15 March 2001)
- **European Patent Convention** (EPC) database for Achillea millefolium ssp.sudecita **
 Searches EP, WO, Japanese (PAJ) and "worldwide" patent documents

** Results will appear in new browser window

Plant name entries are adapted from the Latin and Common Plant Names database compiled by Henriette Kress and can be found at Henriette's Herbal Homepage.

94166

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=> d his

     (FILE 'HOME' ENTERED AT 15:35:15 ON 15 MAR 2004)

     FILE 'BIOSIS, MEDLINE, CAPLUS, SCISEARCH, JICST-EPLUS, LIFESCI' ENTERED
     AT 15:36:07 ON 15 MAR 2004
L1          2355 S ACHILLEA MILLEFOLIUM  OR YARROW
L2            28 S L1 AND (METHANOL?)
L3             1 S L2 AND (ANTICANCER? OR ANTI-CANCER? OR ANTI-TUMOUR? OR ANTIT
L4            24 S L1 AND (ANTICANCER? OR ANTI-CANCER? OR ANTI-TUMOUR? OR ANTITU
L5            17 DUP REM L4 (7 DUPLICATES REMOVED)
L6           104 S L1 AND (ALCOHOL?)
L7            91 DUP REM L6 (13 DUPLICATES REMOVED)
L8             1 S L7 AND (ANTICANCER? OR ANTI-CANCER? OR ANTI-TUMOUR? OR ANTIT
L9            19 S L1 AND (TUMOR? OR ANTI-TUMOROG? OR ANTITUMOROG? OR METAS? OR
L10           15 DUP REM L9 (4 DUPLICATES REMOVED)
L11          240 S (MILFOIL STAUNCH WEED OR NOSEBLEED OR SOLDIER? HERB OR CARPEN
L12            6 S L11 AND (TUMOR? OR ANTI-TUMOROG? OR ANTITUMOROG? OR METAS? OR
L13            6 DUP REM L12 (0 DUPLICATES REMOVED)
L14           17 S L11 AND (ANTICANCER? OR ANTI-CANCER? OR ANTI-TUMOUR? OR ANTIT
L15           16 DUP REM L14 (1 DUPLICATE REMOVED)
L16          124 S (L1 OR L11) (S) EXTRACT?
L17            6 DUP REM L13 (0 DUPLICATES REMOVED)
L18           84 DUP REM L16 (40 DUPLICATES REMOVED)
L19           11 S L18 AND (METHANOL? OR ALCOHOL?)
L20            3 S L18 AND (METHANOL?)
L21           84 DUP REM L18 (0 DUPLICATES REMOVED)
```

First Hit

L5: Entry 14 of 15 File: JPAB Apr 14, 1987

PUB-NO: JP362081349A
DOCUMENT-IDENTIFIER: JP 62081349 A
TITLE: ANTITUMOR ACTIVE SUBSTANCE ACHIMILIC ACID

PUBN-DATE: April 14, 1987

INVENTOR-INFORMATION:

NAME	COUNTRY
ISHII, HIROSHI	
SAKURAI, KENSUKE	
TOJO, TAKEHIKO	

ASSIGNEE-INFORMATION:

NAME	COUNTRY
SHIONOGI & CO LTD	

1D5

APPL-NO: JP60222370
APPL-DATE: October 4, 1985

US-CL-CURRENT: 560/121
INT-CL (IPC): C07C 59/82; C07C 59/90; C07C 69/73; A61K 31/19; A61K 31/215

ABSTRACT:

NEW MATERIAL:A compound expressed by the formula (R and R1 are CH3 or OH; R2 is H or lower alkyl; the wavy line represents Z or E isomer).

EXAMPLE: Methyl achimilate A.

USE: A medicine having antitumor action.

PREPARATION: The flower part of Achillea millefolium L. of the family Composite which a natural polyoxide having antitumor action is dried and extracted with a polar organic solvent, e.g. methanol, at room temperature for several days and the resultant extract is separated by shaking using a water-immiscible lower alcohol, e.g. butanol. An acidic substance is then extracted with a basic solution and an aqueous layer is acidified and extracted with an organic solvent, e.g. ethyl acetate. The resultant acidic substance is separated by silica gel chromatography to afford the aimed active substance corresponding to P388 (achimilic acid) expressed by the formula (R2 is H), which is then esterified to give the compound expressed by the formula (where R2 is alkyl).

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10/069,492
8/20/1999

L5 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:236406 CAPLUS
DOCUMENT NUMBER: 136:268150
TITLE: Topical emollient composition containing fatty acids for ameliorating changes in subcutaneous adipose tissue
INVENTOR(S): Allen, Michael P.
PATENT ASSIGNEE(S): USA
SOURCE: U.S., 16 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6361806	B1	20020326	US 2000-511056	20000223

PRIORITY APPLN. INFO.: US 2000-511056 20000223

AB Emollient compns. for topical administration consisting of hydrophilic/hydrophobic emulsions containing a polyacrylate carrier, a vehicle, a mixture of C16:0, C18:0, C18:1 fatty acids and derivs. as penetrants, a balanced mixture of unsatd. C18:1, C18:2 and C18:3 fatty acids, a natural anti-inflammatory compound, a natural analgesic compound, a natural estrogenic compound and a fragrance are described. They are useful for ameliorating symptoms of disease, including mammary fibrocystic disease, cyclic mastitis, inflammation and general and specific pre- and post-menopausal pain and swelling. For example, a cream emulsion was prepared by combining (A) a carrier containing Carbomer 940 0.80 g and water 43.3 g, (B) a vehicle/penetrant phase containing urea 2.95 g, imidurea 0.05 g, sorbitol 1.00 g, sodium borate 0.05 g, sodium ascorbyl phosphate 0.26 g, and water 14.43, and (C) a hydrophobic phase containing ethanol 10.0 g, ispropyl alc. 6.000 g, propylene glycol 6.00 g, bisabolol 2.00 g, triethanolamine 1.00 g, Brij 99 1.00 g, α-tocopherol 0.10 g, glycerin 0.10 g, methylparaben 0.05 g, propylparaben 0.05 g, conjugate linoleic acid 5.00 g, borage oil 5.00 g, vanilla fragrance 0.86 g, and optionally linoleic acid 2.75 g and γ-linolenic acid 1.25 g.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:591669 CAPLUS
DOCUMENT NUMBER: 137:154384
TITLE: Symbiotic regenerative compositions containing microorganisms
INVENTOR(S): Schuer, Joerg-Peter
PATENT ASSIGNEE(S): Germany
SOURCE: Eur. Pat. Appl., 25 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1228769	A1	20020807	EP 2001-102384	20010202
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
WO 2002067986	A2	20020906	WO 2002-EP1056	20020201
WO 2002067986	A3	20031211		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1390071 A2 20040225 EP 2002-712882 20020201

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: EP 2001-102384 A 20010202
WO 2002-EP1056 W 20020201

AB The invention concerns regenerative drugs, dietary supplements, feed additives that contain microorganisms and modulating substances, e.g. enzymes, GRAS (Generally Recognized As Safe) aromas, plant exts. Further the compns. contain vitamins, minerals, growth promoters, carrier substances, etc. Microorganisms are a-pathogenic, pathogenic or facultative pathogenic,.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2002:840191 CAPLUS

DOCUMENT NUMBER: 138:66642

TITLE: Biochemical investigation of **yarrow** extracts (**Achillea millefolium** L.)

AUTHOR(S): Popovic, M.; Jakovljevic, V.; Bursac, M.; Mitic, R.; Raskovic, A.; Kaurinovic, B.

CORPORATE SOURCE: Institute of Chemistry, Faculty of Sciences, University of Novi Sad, Yugoslavia

SOURCE: Oxidation Communications (2002), 25(3), 469-475
CODEN: OXCODW; ISSN: 0209-4541

PUBLISHER: SciBulCom Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB **Yarrow** (**Achillea millefolium** L.) has been considered medicinal plant ever since in our folk medicine, and has been known also by European and Central Asian peoples. Its leaves (Millefolii folium), flowers (Millefolii flos) and whole plant (Millefolii herba) have been used as therapeutic agents. **Yarrow** has always been considered medically very effective as aromatic, tonic, stomatic, stimulant, antispasmodic, emetic, and antipyretic. It is also very effective against hemorrhoids, catarrh of stomach and intestines, malfunction of kidneys and liver, etc. Achillein was shown to exhibit hemostatic effects and the leaf extract diminishes the development of pathogens. Tannins and essential oils prevent festering of wounds, accelerate their healing, and decrease pain. Ethanol extract of **yarrow** (most active compds.: stahidrin and pyrocatechol) has repulsive effect on mosquitoes (Aedes aegypti L.), especially by larvicide effect. Other effects such as antihemorrhagic and sedative, tonic, antispasmodic, antipyretic, analgesic, astringent, carminative, diaphoretic, antimycotic and **antineoplastic** have been described. Pretreatment with exts. of **Achillea millefolium** leaves and flowers significantly reduced LPx values in liver homogenate. Combination of **Achillea millefolium** extract (leaves and flowers) and CCl4 also reduced LPx (compared to animals treated with CCl4, and even to untreated animals). As for CAT activity, extract of leaves reduced activity of CAT. It is interesting to point to the effect of "intoxication" with CCl4 caused decrease of CAT, as did combination of **Achillea millefolium** exts. (leaves and flowers) and CCl4. Activity of XOD was enhanced upon administration of **Achillea millefolium** extract (leaves and flowers), while CCl4 had no effect on XOD activity, nor had combination of extract and CCl4. Content of GSH has not changed upon treatment with **Achillea**

millefolium leaves and flowers extract, but it was statistically significantly reduced upon intoxication with CCl4 and with combination exts./CCl4, which points to important hepatoprotective role of GSH, i.e. its antioxidative activity. Activity of GSHPx was reduced in a very high degree in all cases of treatment with exts. alone or with combination of exts. and CCl4. LPx content was reduced after treatment with extract of **Achillea millefolium** leaves, and statistically very significantly enhanced after administration of CCl4. Combination of exts. of **Achillea millefolium** leaves and flowers also caused decrease of LPx compared to control (untreated animals) and to control with CCl4-pretreated animals. Extract of leaves had no effect on XOD activity alone or in combination with CCl4. Px was influenced only by treatment with CCl4, and Px activity was enhanced. Content of GSH was decreased in hemolyzate (as well as in liver homogenate) upon treatment with CCl4 and with combination of flower extract and CCl4. Activities of transminases (AST and ALT) were enhanced after treatment with CCl4, and with exts. of flowers and leaves in combination with CCl4.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 17 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 2002444896 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12203264
TITLE: In vitro anti-hepatoma activity of fifteen natural medicines from Canada.
AUTHOR: Lin Liang-Tzung; Liu Li-Teh; Chiang Lien-Chai; Lin Chun-Ching
CORPORATE SOURCE: Department of Microbiology and Immunology, McGill University, Canada.
SOURCE: Phytotherapy research : PTR, (2002 Aug) 16 (5) 440-4. Journal code: 8904486. ISSN: 0951-418X.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200212
ENTRY DATE: Entered STN: 20020831
Last Updated on STN: 20030102
Entered Medline: 20021231

AB Fifteen crude drugs, Stellaria media Cyrill. (Caryophyllaceae), Calendula officinalis L. (Compositae), **Achillea millefolium** L. (Compositae), Verbascum thapsus L. (Scrophulariaceae), Plantago major L. (Plantaginaceae), Borago officinalis L. (Boraginaceae), Satureja hortensis L. (Labiatae), Coptis groenlandica Salisb. (Ranunculaceae), Cassia angustifolia Vahl. (Leguminosae), Origanum majorana L. (Labiatae), Centella asiatica L. (Umbelliferae), Caulophyllum thalictroides Mich. (Berberidaceae), Picea rubens Sargent. (Pinaceae), Rhamnus purshiana D.C. (Rhamnaceae) and Hibiscus sabdariffa L. (Malvaceae), which have been used as folk medicine in Canada, were evaluated for their anti-hepatoma activity on five human liver-**cancer** cell lines, i.e. HepG2/C3A, SK-HEP-1, HA22T/VGH, Hep3B and PLC/PRF/5. The samples were examined by in vitro evaluation for their cytotoxicity. The results showed that the effects of crude drugs on hepatitis B virus genome-containing cell lines were different from those against non hepatitis B virus genome-containing cell lines. C. groenlandica was observed to be the most effective against the growth of all five cell lines and its chemotherapeutic values will be of interest for further studies.
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L5 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:152500 CAPLUS
DOCUMENT NUMBER: 134:198039
TITLE: **Antineoplastic** extract from **Achillea millefolium**

INVENTOR(S): Alaoui-Jamali, Moulay A.; Ghadirian, Parviz
PATENT ASSIGNEE(S): Centre for Translational Research in Cancer, Can.
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001013929	A1	20010301	WO 2000-CA949	20000817

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-149697P P 19990820
AB The present invention relates to isolated and purified plant exts. An isolated and purified extract from **Achillea millefolium** to treat and prevent **cancer** is described. The purified fractions were administered to animals in which **cancer** was induced. The fractions demonstrated antimetastatic activity. Mols. contained in the fractions may also be used to treat and prevent **cancer**. Dried A. millefolium was ground and extracted with MeOH for 48 h. The extract was purified by chromatog. The effectiveness of the extract in inhibiting the lung carcinoma was demonstrated.
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:885995 CAPLUS
DOCUMENT NUMBER: 137:72699
TITLE: Cytostatic activity of Achillea ageratum L.
AUTHOR(S): Gomez, M. A.; Garcia, M. D.; Saenz, M. T.
CORPORATE SOURCE: Laboratory of Pharmacology, Faculty of Pharmacy, University of Sevilla, Seville, 41012, Spain
SOURCE: Phytotherapy Research (2001), 15(7), 633-634
CODEN: PHYREH; ISSN: 0951-418X
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The cytostatic activity of a CHCl3 extract of A. ageratum (Asteraceae) and of 2 compds. isolated therefrom was determined in vitro against Hep-2 and McCoy cells. The extract produced a high degree of growth inhibition of both cell types, compared with that given by 6-mercaptopurine (pos. control). Stigmasterol and β-sitosterol, isolated from the extract, also caused a high degree of growth inhibition.
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:504397 CAPLUS
DOCUMENT NUMBER: 136:226235
TITLE: Use of DNA for detection and isolation of potential **anticancer** agents from plants
AUTHOR(S): Ionkova, I.; Alferman, A.
CORPORATE SOURCE: Farm. Fak., Med. Univ., Sofia, Bulg.
SOURCE: Farmatsiya (Sofia) (2000), 47(1-2), 10-16
CODEN: FMTYA2; ISSN: 0428-0296

PUBLISHER: Tsentur za Informatsiya po Meditsina
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Crude exts. from plants used in traditional medicine, and exts. from plant cell cultures have been screened for potential **anticancer** bioactive agents, using evaluation of DNA-interaction activity. Calf thymus DNA and pUC19 (ATCC 37254) E.coli plasmid was evaluated in order to optimize the employed test system. Our results show that of the over 100 tested exts. and isolated compds., 23% proved active in DNA interaction. We have found that there was correlation in DNA-intercalation and the hemolytic effect in some plant exts., which contained triterpenoid saponins. Application of the intercalation test is repaid and economically effective for pre-screen and bioassay-guided fractionation of crude exts. from higher plants and in vitro-cell cultures.
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:556738 CAPLUS
DOCUMENT NUMBER: 131:189686
TITLE: Cell adhesion inhibitor
INVENTOR(S): Ito, Kazunori; Shoji, Tomiko; Tabata, Shinobu; Sugimoto, Mamoru
PATENT ASSIGNEE(S): Nissin Food Products Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11236334	A2	19990831	JP 1998-332707	19981124

PRIORITY APPLN. INFO.: JP 1997-330209 19971201
AB The cell adhesion and metastasis inhibitor is prepared from Chrysanthemum, Terminalia chebula, Trapa japonica, Geum japonicum, Punica granatum, Arctostaphylos uva-ursi, **Achillea millefolium**, Rosa, Cuminum cyminum, Eugenia aromatica, Solidago virga-aurea, Polygalae radix, Gymnema sylvestre, Symphytum officinale, Dianthus superbus, Platycodon grandiflorum, Calendula officinalis, Capsicum annuum, Gynostemma pentaphyllum, Bupleurum falcatum, Anemarrhena asphodeloides, Humulus lupulus, and/or Lonicera japonica. Also the cell adhesion and metastasis inhibitor is manufactured from the extract of these plant and herb.

L5 ANSWER 9 OF 17 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 3
ACCESSION NUMBER: 2000:544025 BIOSIS
DOCUMENT NUMBER: PREV200000544025
TITLE: Anatomy and evaluation of the antimicrobian activity in vitro of **yarrow** (**Achillea millefolium** L.).
Original Title: Anatomia e avaliacao da atividade antimicrobiana in vitro de mil-folhas (**Achillea millefolium** L.).
AUTHOR(S): Jorge, Luzia Ilza Ferreira [Reprint author]; Pregnolatto, Beatriz Pedroso [Reprint author]; Chicourel, Elizabeth Lemos; Zamariolli, Liliana Aparecida [Reprint author]; Graciano, Rejane Alexandre Silva
CORPORATE SOURCE: Laboratorio I de Santos, Instituto Adolfo Lutz, 11015-101, Santos, SP, Brazil
SOURCE: Revista de Ciencias Farmaceuticas, (1999) Vol. 20, No. 2, pp. 449-458. print.
CODEN: RCIFDN. ISSN: 0101-3793.

DOCUMENT TYPE: Article
LANGUAGE: Portuguese
ENTRY DATE: Entered STN: 13 Dec 2000
Last Updated on STN: 11 Jan 2002

AB **Achillea millefolium** L. is a specie representative of the richness of the secondary metabolism of the family Compositae ou Asteraceae, throughly represented in our country. The specie here studied is popularly known by its **antitumor**, antibacterial, antihypertensive and cicatrizing activities, but without enough scientific comprovation up to now. Two hairs are its more important annexs to help the diagnosis of the specie: a tector hair with four square basal cells and a sessile alongated terminal cell; and a gland hair with a unicellular head. The determination of the antibacterial activity was made by the difusion in agar technique. The essential oil revealed larger spectrum of action than the fluid-extract.

L5 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:568858 CAPLUS
DOCUMENT NUMBER: 125:237797
TITLE: Cytostatic activity of some essential oils against HEP-2 cells
AUTHOR(S): Saenz, Maria Teresa; Garcia, Maria Dolores; De La Puerta, Rocio
CORPORATE SOURCE: Fac. Pharm., Univ. Seville, Seville, 41021, Spain
SOURCE: Farmaco (1996), 51(7), 539-540
CODEN: FRMCE8
PUBLISHER: Societa Chimica Italiana
DOCUMENT TYPE: Journal
LANGUAGE: English

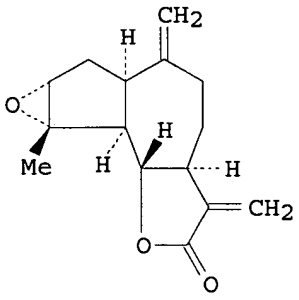
AB Samples of different essential oils have been tested for their cytostatic activity. The samples of cinnamon and clove essential oils showed a strong in vitro activity against HEp-2 cells.

L5 ANSWER 11 OF 17 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 4
ACCESSION NUMBER: 1994:361470 BIOSIS
DOCUMENT NUMBER: PREV199497374470
TITLE: Novel **Antitumor** Sesquiterpenoids in **Achillea millefolium**.
AUTHOR(S): Tozyo, Takehiko [Reprint author]; Yoshimura, Yohko; Sakurai, Kensuke; Uchida, Naomi; Takeda, Yukihiro; Nakai, Hiroshi; Ishii, Hiroshi
CORPORATE SOURCE: Shionogi Res. Laboratories, Shionogi Co. Ltd., Fukushima-ku, Osaka 553, Japan
SOURCE: Chemical and Pharmaceutical Bulletin (Tokyo), (1994) Vol. 42, No. 5, pp. 1096-1100.
CODEN: CPBTAL. ISSN: 0009-2363.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 23 Aug 1994
Last Updated on STN: 23 Aug 1994

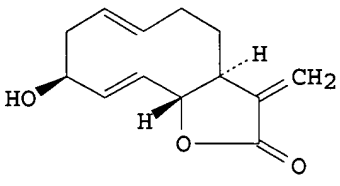
AB Three new **antitumor** sesquiterpenoids, achimillic acids A, B and C, were isolated as methyl esters from **Achillea millefolium** and their structures were determined spectroscopically. The compounds were found to be active against mouse P-388 leukemia cells in vivo.

L5 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1992:433509 CAPLUS
DOCUMENT NUMBER: 117:33509
TITLE: Age dynamics of accumulation of sesquiterpene lactones in Achillea nobilis L
AUTHOR(S): Adekenov, S. M.; Kupriyanov, A. N.; Turmukhambetov, A. Zh.; Beisembaeva, A. M.

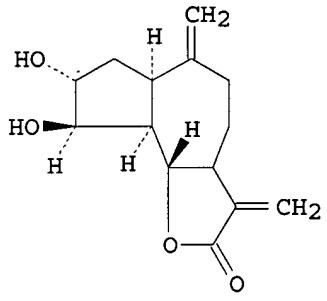
CORPORATE SOURCE: Inst. Org. Sint. Uglekhim., Karagande, USSR
SOURCE: Rastitel'nye Resursy (1991), 27(3), 59-66
CODEN: RRESA8; ISSN: 0033-9946
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI



I



II



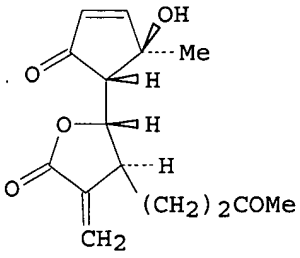
III

AB Of sesquiterpene γ-lactones from A. nobilis, estafiatin (I) is a cell growth inhibitor, chanfillin (II) has **antitumor** activity and anolide (III) is an acaricide. Therefore the contents of the active principles were monitored in cultivated A. nobilis. I and II occurred in all the aerial organs during growth and were highest in foliage. III was found only in the inflorescences with low I and II contents. I is most probably formed by cyclization of II, whereas Markovnikov cyclization of 4,5-epoxy-II probably forms III.

L5 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1987:629148 CAPLUS
DOCUMENT NUMBER: 107:229148
TITLE: Isolation of achimilic acid A lactone as **antitumor** agent
INVENTOR(S): Ishii, Hiroshi; Sakurai, Kensuke; Tojo, Takehiko
PATENT ASSIGNEE(S): Shionogi and Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62081379	A2	19870414	JP 1985-222371	19851004
JP 05052292	B4	19930805		

PRIORITY APPLN. INFO.: JP 1985-222371 19851004
GI



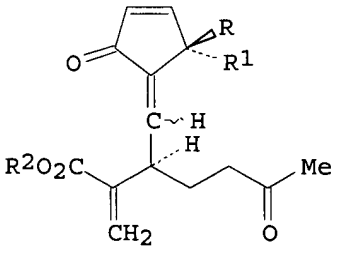
I

AB The title compound (I), useful as an **antitumor** agent, was isolated from Achillea millefollium L. Crude I was extracted with MeOH from A. millefolium L. flowers and subsequently purified twice by silica gel chromatog. I given once at 2 mg/kg, i.p., increased the life span of mice with transplanted P388 leukemia by 38%, and when administered continuously for 5 days at 1 mg/kg, by the same route, 48%.

L5 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1987:561673 CAPLUS
DOCUMENT NUMBER: 107:161673
TITLE: Isolation of achimilic acid derivatives as **antitumor** agents
INVENTOR(S): Ishii, Hiroshi; Sakurai, Kensuke; Tojo, Takehiko
PATENT ASSIGNEE(S): Shionogi and Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62081349	A2	19870414	JP 1985-222370	19851004
JP 06057674	B4	19940803		

PRIORITY APPLN. INFO.: JP 1985-222370 19851004
GI



I

AB The title compds. (I; one of R and R1 is OH, the other is Me; R2 = H, alkyl), useful as **antitumor** agents, are isolated from **Achillea millefolium** L. Crude achimilic acid mixture I (R = OH, R1 = Me; R = Me, R1 = OH; R2 = H) (II) was obtained by extraction of **Achillea millefolium** L. with MeOH. II was then esterified with MeI in Me2CO containing K2CO3 to give ester mixture I (R = OH, R1 = Me; R = Me, R1 = OH; R2 = Me) (III) as a mixture of isomers, which was subjected to adsorption chromatog. to give III A with [α]D(CHCl3) = -23.6°, III B with [α]D(CHCl3) = -78.2°, and III C

with [α]D(CHCl3) = -87.3°. at 2 mg/kg i.p., III A increased the life span of mice with transplanted P388 leukemia by 30% in comparison with a control.

L5 ANSWER 15 OF 17 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1985:148508 BIOSIS
DOCUMENT NUMBER: PREV198529038504; BR29:38504
TITLE: **ANTITUMOR** ACTIVITY OF MEDICINAL PLANTS OF THE LITHUANIAN-SSR USSR 4. **YARROW ACHILLEA-MILLEFOLIUM.**
AUTHOR(S): VALAVICHYUS YU M [Reprint author]; YANKYAVICHYUS K K; MAZELAITIS I V; BUDRENE S F; SERULYAVICHENE E V
CORPORATE SOURCE: INST BIOCHEM, ACAD SCI LITH SSR, VILNIUS, USSR
SOURCE: Lietuvos TSR Mokslu Akademijos Darbai Serija C Biologijos Mokslai, (1984) No. 4, pp. 136-139.
ISSN: 0131-3851.
DOCUMENT TYPE: Article
FILE SEGMENT: BR
LANGUAGE: RUSSIAN

L5 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1980:143262 CAPLUS
DOCUMENT NUMBER: 92:143262
TITLE: Isolation and structure determination of naturally occurring sesquiterpene lactone from Compositae
AUTHOR(S): Rustaiyan, Abdolhossein; Niknejad, Akram; Nazarians, Lilly
CORPORATE SOURCE: Cent. Org. Chem. Res., Natl. Univ. Iran, Iran
SOURCE: Pazhoohandeh (Tehran) (1978), 21, 183-201
CODEN: PZHHDR
DOCUMENT TYPE: Journal
LANGUAGE: Persian
AB In a detailed study of structure and chemical transformation of naturally occurring terpene derivs., particularly sesquiterpene lactones, from Compositae, a new compound of this type (dihydroelephantopin, I) was isolated from Elephantopus tomentosus. I exhibited tumor-inhibiting activity in preliminary tests against leukemia tumor cells (PS-type). Carthamus oxyacantha Yielded a sesquiterpene glycoside, not further identified; Achillea eriphora yielded a guaianolide-type sesquiterpene lactone, and Thevenotia persica yielded the pentacyclic triterpenes β-amyrin and lupeol.

L5 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1932:34265 CAPLUS
DOCUMENT NUMBER: 26:34265
ORIGINAL REFERENCE NO.: 26:3571g-i
TITLE: Active sensitization of animals to chemically defined substances and substances of plant origin
AUTHOR(S): Stumpke, G.
SOURCE: Klinische Wochenschrift (1932), 11, 58-61
CODEN: KLWOAZ; ISSN: 0023-2173
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Guinea pigs can be sensitized by intradermal injections at 5-8 day intervals of various substances (exts. of chrysanthemum, tulip, jasmine, milfoil, primrose, cactus and elder, as well as turpentine and croton oil). Other plants (alpine violets, roses, geranium, etc.), and other chemical substances, such as neoarsphenamine, myosalvarsan, novasurol. were found to be inactive. Microscopically, a pos. reaction is characterized by vasodilatation, both of capillaries and veins, thrombosis in the smaller veins, small hemorrhages and comparatively little inflammatory reaction.

L10 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:274748 CAPLUS
DOCUMENT NUMBER: 138:292431
TITLE: Skin compositions containing hydroxypyridone derivatives and specified plant extracts
INVENTOR(S): Kametani, Nozomi; Fujita, Sanae
PATENT ASSIGNEE(S): Lion Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003104886	A2	20030409	JP 2001-301483	20010928

PRIORITY APPLN. INFO.: JP 2001-301483 20010928

AB The invention relates to a skin composition having excellent skin keratin layer condition-improving effect and storage stability, wherein the composition is characterized by containing a hydroxypyridone derivative and a plant extract having keratin layer-conditioning effect. A cream composition cotnaining piroctone olamine (Octopirox) 0.1, a platn extracxt, e.g. Durvilleaceae extract, 0.3, and other ingredients and water q.s., to 100 % was formulated.

L10 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:142531 CAPLUS
DOCUMENT NUMBER: 136:178018
TITLE: Essential oils and chemically related species for the treatment of increased bone resorption
INVENTOR(S): Muehlbauer, Roman
PATENT ASSIGNEE(S): University of Bern, Switz.
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002013840	A1	20020221	WO 2001-CH395	20010626
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001073759	A5	20020225	AU 2001-73759	20010626

PRIORITY APPLN. INFO.: US 2000-226355P P 20000818
WO 2001-CH395 W 20010626

AB The present invention relates to cosmetic, nutritional or pharmaceutical compns. comprising essential oils extracted from plants and/or monoterpenes derived thereof, their metabolites and chemical related species. Said essential oils and their monoterpenes are useful in the treatment or prevention of diseases or conditions characterized by increased bone resorption, such as Paget's disease, **tumor**-induced bone disease or particularly osteoporosis. The invention further comprises a method for the preparation of said compns. as well as their uses. Examples are given

of the beneficial effects of essential oils and monoterpenes on bone mass in aged ovariectomized rats.
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 15 MEDLINE on STN
ACCESSION NUMBER: 2002444896 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12203264
TITLE: In vitro anti-hepatoma activity of fifteen natural medicines from Canada.
AUTHOR: Lin Liang-Tzung; Liu Li-Teh; Chiang Lien-Chai; Lin Chun-Ching
CORPORATE SOURCE: Department of Microbiology and Immunology, McGill University, Canada.
SOURCE: Phytotherapy research : PTR, (2002 Aug) 16 (5) 440-4. Journal code: 8904486. ISSN: 0951-418X.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200212
ENTRY DATE: Entered STN: 20020831
Last Updated on STN: 20030102
Entered Medline: 20021231

AB Fifteen crude drugs, Stellaria media Cyrill. (Caryophyllaceae), Calendula officinalis L. (Compositae), **Achillea millefolium** L. (Compositae), Verbascum thapsus L. (Scrophulariaceae), Plantago major L. (Plantaginaceae), Borago officinalis L. (Boraginaceae), Satureja hortensis L. (Labiatae), Coptis groenlandica Salisb. (Ranunculaceae), Cassia angustifolia Vahl. (Leguminosae), Origanum majorana L. (Labiatae), Centella asiatica L. (Umbelliferae), Caulophyllum thalictroides Mich. (Berberidaceae), Picea rubens Sargent. (Pinaceae), Rhamnus purshiana D.C. (Rhamnaceae) and Hibiscus sabdariffa L. (Malvaceae), which have been used as folk medicine in Canada, were evaluated for their anti-hepatoma activity on five human liver-cancer cell lines, i.e. HepG2/C3A, SK-HEP-1, HA22T/VGH, Hep3B and PLC/PRF/5. The samples were examined by in vitro evaluation for their cytotoxicity. The results showed that the effects of crude drugs on hepatitis B virus genome-containing cell lines were different from those against non hepatitis B virus genome-containing cell lines. C. groenlandica was observed to be the most effective against the growth of all five cell lines and its chemotherapeutic values will be of interest for further studies.
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L10 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:152500 CAPLUS
DOCUMENT NUMBER: 134:198039
TITLE: Antineoplastic extract from **Achillea millefolium**
INVENTOR(S): Alaoui-Jamali, Moulay A.; Ghadirian, Parviz
PATENT ASSIGNEE(S): Centre for Translational Research in Cancer, Can.
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001013929	A1	20010301	WO 2000-CA949	20000817

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,

LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: US 1999-149697P P 19990820

AB The present invention relates to isolated and purified plant exts. An isolated and purified extract from **Achillea millefolium** to treat and prevent cancer is described. The purified fractions were administered to animals in which cancer was induced. The fractions demonstrated **antimetastatic** activity. Mols. contained in the fractions may also be used to treat and prevent cancer. Dried A. millefolium was ground and extracted with MeOH for 48 h. The extract was purified by chromatog. The effectiveness of the extract in inhibiting the lung carcinoma was demonstrated.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 5 OF 15 MEDLINE on STN DUPLICATE 1
ACCESSION NUMBER: 2001511538 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11558643
TITLE: Final report on the safety assessment of **Yarrow** (**Achillea millefolium**) Extract.
AUTHOR: Anonymous
SOURCE: International journal of toxicology, (2001) 20 Suppl 2 79-84. Ref: 31
Journal code: 9708436. ISSN: 1091-5818.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200201
ENTRY DATE: Entered STN: 20010918
Last Updated on STN: 20020128
Entered Medline: 20020123

AB **Yarrow** (**Achillea Millefolium**) Extract is an extract of the **yarrow** plant, **Achillea millefolium**, supplied in polypropylene glycol, which is reported to function as a "biological additive" in cosmetic products. Sesquiterpene lactones, polyacetylenes, simple coumarins, and flavonoids have been identified among the many components of A. millefolium. **Yarrow** Extract was reportedly used in 65 cosmetic formulations. Historically, **Yarrow** (**Achillea Millefolium**) Extract was reported to be used at concentrations of < or =25%, but recent data indicate that this ingredient is supplied with actual **Yarrow** (**Achillea Millefolium**) Extract content of 2% to 25% and used at concentrations of 0.5% to 10%. Only limited toxicity data were available. Guinea pigs were sensitized to crude extracts of the whole plant and the flowers of A. millefolium. A. millefolium tea was weakly genotoxic in a somatic mutation and recombination test using Drosophila melanogaster. In clinical testing, product formulations containing 0.1% to 0.5% of ingredient that actually contained 2% of **Yarrow** Extract were generally not irritating. In provocative testing, patients reacted to a Compositae mix that contained **yarrow**, as well as to **yarrow** itself. Also in clinical testing, a formulation containing 0.1% **Yarrow** (**Achillea Millefolium**) Extract (2% **Yarrow** in propylene glycol and water) was not a sensitizer in a maximization test and alcoholic extracts of dried leaves and stalks of A. millefolium did not produce a phototoxic response. These data were not considered sufficient to support the safety of this ingredient in cosmetics. The types of data (all testing is to be

performed on cosmetic-grade ingredients) still required include (1) ultraviolet (UV) absorption data, if absorption occurs in the UVA or UVB range, photosensitization data are needed; (2) gross pathology and histopathology in skin and other major organ systems associated with repeated exposures; (3) reproductive and developmental toxicity data; (4) two genotoxicity studies, one using a mammalian system, if positive, a 2-year dermal **carcinogenicity** assay performed using National Toxicology Program (NTP) methods may be needed; and (5) clinical sensitization testing at maximum concentration of use. In the absence of these data, it was concluded that the available data are insufficient to support the safety of **Yarrow** (**Achillea Millefolium**) Extract for use in cosmetic products.

L10 ANSWER 6 OF 15 LIFESCI COPYRIGHT 2004 CSA on STN
ACCESSION NUMBER: 2002:35891 LIFESCI
TITLE: Final Report on the Safety Assessment of **Yarrow** (**Achillea Millefolium**) Extract
AUTHOR: Fiume, M.Z.
CORPORATE SOURCE: Cosmetic Ingredient Review, 1101 17th Street, NW, Suite 310, Washington, DC 20036, USA
SOURCE: International Journal of Toxicology [Int. J. Toxicol.], (20010000) vol. 20, Suppl. 2, pp. 79-84. ISSN: 1091-5818.
DOCUMENT TYPE: Journal
FILE SEGMENT: X; Z
LANGUAGE: English
SUMMARY LANGUAGE: English
AB **Yarrow** (**Achillea Millefolium**) Extract is an extract of the **yarrow** plant, **Achillea millefolium**, supplied in polypropylene glycol, which is reported to function as a "biological additive" in cosmetic products. Sesquiterpene lactones, polyacetylenes, simple coumarins, and flavonoids have been identified among the many components of A. millefolium. **Yarrow** Extract was reportedly used in 65 cosmetic formulations. Historically, **Yarrow** (**Achillea Millefolium**) Extract was reported to be used at concentrations of less than or equal to 25%, but recent data indicate that this ingredient is supplied with actual **Yarrow** (**Achillea Millefolium**) Extract content of 2% to 25% and used at concentrations of 0.5% to 10%. Only limited toxicity data were available. Guinea pigs were sensitized to crude extracts of the whole plant and the flowers of A. millefolium. A. millefolium tea was weakly genotoxic in a somatic mutation and recombination test using Drosophila melanogaster. In clinical testing, product formulations containing 0.1% to 0.5% of ingredient that actually contained 2% of **Yarrow** Extract were generally not irritating. In provocative testing, patients reacted to a Compositae mix that contained **yarrow**, as well as to **yarrow** itself. Also in clinical testing, a formulation containing 0.1% **Yarrow** (**Achillea Millefolium**) Extract (2% **Yarrow** in propylene glycol and water) was not a sensitizer in a maximization test and alcoholic extracts of dried leaves and stalks of A. millefolium did not produce a phototoxic response. These data were not considered sufficient to support the safety of this ingredient in cosmetics. The types of data (all testing is to be performed on cosmetic-grade ingredients) still required include (1) ultraviolet (UV) absorption data, if absorption occurs in the UVA or UVB range, photosensitization data are needed; (2) gross pathology and histopathology in skin and other major organ systems associated with repeated exposures; (3) reproductive and developmental toxicity data; (4) two genotoxicity studies, one using a mammalian system, if positive, a 2-year dermal **carcinogenicity** assay performed using National Toxicology Program (NTP) methods may be needed; and (5) clinical sensitization testing at maximum concentration of use. In the absence of these data, it was concluded that the available data are insufficient to support the safety of **Yarrow** (**Achillea**

Millefolium) Extract for use in cosmetic products.

L10 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:556738 CAPLUS
DOCUMENT NUMBER: 131:189686
TITLE: Cell adhesion inhibitor
INVENTOR(S): Ito, Kazunori; Shoji, Tomiko; Tabata, Shinobu; Sugimoto, Mamoru
PATENT ASSIGNEE(S): Nissin Food Products Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11236334	A2	19990831	JP 1998-332707	19981124

PRIORITY APPLN. INFO.: JP 1997-330209 19971201

AB The cell adhesion and **metastasis** inhibitor is prepared from Chrysanthemum, Terminalia chebula, Trapa japonica, Geum japonicum, Punica granatum, Arctostaphylos uva-ursi, **Achillea millefolium**, Rosa, Cuminum cyminum, Eugenia aromatica, Solidago virga-aurea, Polygalae radix, Gymnema sylvestre, Symphytum officinale, Dianthus superbus, Platycodon grandiflorum, Calendula officinalis, Capsicum annuum, Gynostemma pentaphyllum, Bupleurum falcatum, Anemarrhena asphodeloides, Humulus lupulus, and/or Lonicera japonica. Also the cell adhesion and **metastasis** inhibitor is manufactured from the extract of these plant and herb.

L10 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:412292 CAPLUS
DOCUMENT NUMBER: 131:167743
TITLE: Essential oils from hairy root cultures and from plant roots of **Achillea millefolium**
AUTHOR(S): Lourenco, P. M. L.; Figueiredo, A. C.; Barroso, J. G.; Pedro, L. G.; Oliveira, M. M.; Deans, S. G.; Scheffer, J. J. C.
CORPORATE SOURCE: Centro de Biotecnologia Vegetal, Departamento de Biologia Vegetal, Faculdade de Ciencias de Lisboa, Lisbon, 1749-016, Port.
SOURCE: Phytochemistry (1999), 51(5), 637-642
CODEN: PYTCAS; ISSN: 0031-9422
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The essential oils isolated from roots of two **Achillea millefolium** populations (BGL and CGA) and from two hairy root cultures (A4 and LBA) derived from one of these were analyzed by GC and GC-mass spectrometry. The essential oils from the plant roots were obtained in a yield of 0.10% (BGL) and 0.05% (CGA) (v/w), whereas that of both hairy root cultures attained 0.05% (v/w). Compared on a dry weight basis, the yield from the hairy root cultures was similar to or higher than that from the plant roots. The oxygen-containing sesquiterpene fraction of the root oils from both plant populations was the most characteristic one, epi-cubenol being the main component of these oils (18% for BGL and 26% for CGA). Oxygen-containing monoterpenes constituted the most important fraction of the essential oils from both hairy root cultures, neryl isovalerate being the main component (27% and 43% for A4 and LBA, resp.). No major differences were detected in the root essential oil profiles of the two A. millefolium plant populations, but qual. and quant. differences were found between the essential oils from the plant roots and those from the hairy roots, and also between the oils from the two hairy root

cultures.
REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 9 OF 15 JICST-EPlus COPYRIGHT 2004 JST on STN
ACCESSION NUMBER: 960724510 JICST-EPlus
TITLE: Evaluation of plant extracts on depigmentation effect in cultured B16 melanoma cells.
AUTHOR: OBAYASHI KEI; IWAMOTO ATSUHIRO; MASAKI HITOSHI
CORPORATE SOURCE: Noevir Co., Ltd., Shiga Cent. Res. Lab.
SOURCE: Nippon Keshohin Gijutsusha Kaishi (Journal of SCCJ), (1996) vol. 30, no. 2, pp. 153-160. Journal Code: S0078A (Fig. 6, Tbl. 2, Ref. 7)
ISSN: 0387-5253
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: Japanese
STATUS: New
AB In the view of tyrosinase synthesis, we established the evaluating method for the development of the agents, using mouse B16 melanoma cells. Furthermore, the inhibitory effects of plant extracts on tyrosinase specific activities in culture B16 melanoma cells were examined by using the evaluating method. **Achillea millefolium**, Artemisia capillaris, Eupatorium fortunei and Polygonum cuspidatum showed the higher inhibitory effects on tyrosinase among plant extracts tested. To clarify the location of the activities in such plant extracts, fractions which were extracted with different solvents such as hexane, ethyl acetate, acetone, ethanol and H2O, were examined on the inhibitory activity of tyrosinase. Achillea millefolum and Eupatorium fortunei showed the activities in the ethyl acetate or acetone-extracted fraction, and the hexane-extracted fraction of Artemisia capillaris gave the highest activity among all fractions. The inhibitory effects of Polygonum cuspidatum was observed in the ethanol-extracted fraction. (author abst.)

L10 ANSWER 10 OF 15 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 2
ACCESSION NUMBER: 1994:361470 BIOSIS
DOCUMENT NUMBER: PREV199497374470
TITLE: Novel Antitumor Sesquiterpenoids in **Achillea millefolium**.
AUTHOR(S): Tozyo, Takehiko [Reprint author]; Yoshimura, Yohko; Sakurai, Kensuke; Uchida, Naomi; Takeda, Yukihiro; Nakai, Hiroshi; Ishii, Hiroshi
CORPORATE SOURCE: Shionogi Res. Laboratories, Shionogi Co. Ltd., Fukushima-ku, Osaka 553, Japan
SOURCE: Chemical and Pharmaceutical Bulletin (Tokyo), (1994) Vol. 42, No. 5, pp. 1096-1100.
CODEN: CPBTAL. ISSN: 0009-2363.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 23 Aug 1994
Last Updated on STN: 23 Aug 1994
AB Three new antitumor sesquiterpenoids, achimillic acids A, B and C, were isolated as methyl esters from **Achillea millefolium** and their structures were determined spectroscopically. The compounds were found to be active against mouse P-388 leukemia cells in vivo.

L10 ANSWER 11 OF 15 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1985:148508 BIOSIS
DOCUMENT NUMBER: PREV198529038504; BR29:38504
TITLE: ANTITUMOR ACTIVITY OF MEDICINAL PLANTS OF THE LITHUANIAN-SSR USSR 4. **YARROW ACHILLEA-MILLEFOLIUM**.
AUTHOR(S): VALAVICHYUS YU M [Reprint author]; YANKYAVICHYUS K K;

MAZELAITIS I V; BUDRENE S F; SERULYAVICHENE E V
CORPORATE SOURCE: INST BIOCHEM, ACAD SCI LITH SSR, VILNIUS, USSR
SOURCE: Lietuvos TSR Mokslu Akademijos Darbai Serija C Biologijos Mokslai, (1984) No. 4, pp. 136-139.
ISSN: 0131-3851.
DOCUMENT TYPE: Article
FILE SEGMENT: BR
LANGUAGE: RUSSIAN

L10 ANSWER 12 OF 15 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1984:179640 BIOSIS
DOCUMENT NUMBER: PREV198477012624; BA77:12624
TITLE: EFFECTS OF HERBAL AND ORDINARY TEAS ON THE MUTAGENICITY OF BENZO A PYRENE IN THE AMES TEST.
AUTHOR(S): JONER E [Reprint author]; DOMMARSNES K
CORPORATE SOURCE: DEP FOOD HYGIENE, VETERINARY COLL NORWAY
SOURCE: Acta Agriculturae Scandinavica, (1983) Vol. 33, No. 1, pp. 53-56.
CODEN: AASCAU. ISSN: 0001-5121.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB The S9 activated mutagenicity of benzo(a)pyrene in Salmonella typhimurium TA 1538 and TA 98 was slightly reduced by a concentrated instant herbal tea while in TA 100 it was significantly increased. Extracts of the component herbs of the instant tea were all more or less inhibitory with TA 100. Black tea completely abolished the mutagenicity of benzo(a)pyrene towards TA 100 whereas oolong tea and green tea had a lower antimutagenic effect. [The instant herbal tea contained sage, **yarrow**, peppermint, mallow, speedwell, common plantain, thyme, elder, millfoil and spiked grass.].

L10 ANSWER 13 OF 15 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1983:324991 BIOSIS
DOCUMENT NUMBER: PREV198376082483; BA76:82483
TITLE: STUDY OF MEDICINAL PLANT RESERVES AND DISTRIBUTION ATLAS COMPILATION IN THE KAZAKH-SSR USSR AND PROSPECTS OF THEIR USE IN PUBLIC HEALTH SERVICE.
AUTHOR(S): KUKENOV M K [Reprint author]; DZHUMAGALIEVA F D; TATIMOVA N G; BESPAEV S B
CORPORATE SOURCE: INST BOT, ACAD SCI KAZ SSR, ALMA-ATA, USSR
SOURCE: Izvestiya Akademii Nauk Kazakhskoi SSR Seriya Biologicheskaya, (1982) No. 1, pp. 3-6.
CODEN: IKABAR. ISSN: 0002-3183.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: RUSSIAN
AB The increased use of drugs from medicinal plants [MP] in the treatment of **tumors**, cardiovascular and other human diseases was due to their mild combined beneficial effect. **Achillea millefolium** , Rosa spp., Hypericum perforatum, Origanum vulgare, Sanguisorba officinalis and Polygonum aviculare formed thickets with possible industrial use. Artemisia absinthum, A. vulgaris, Plantago major and Tussilago farfara were found frequently, but in small quantities. Crataegus sanguinea, Hippophae rhamnoides and Rhaponticum carthamoides were rare species. MP cultivation was considered and the most effective way for their preservation. Such plantations could yield more homogeneous material with mechanized cultivation and harvesting. Matricaria chamomilla, Ammi visnaga, Ononis arvensis, Ziziphora spp., Lagochilus tumulentus and other MP were tested for cultivation. Z. tenuior and other Ziziphora species, the Alma-Ata crazyweed (Oxytropis genus) with beneficial effect on cardiovascular diseases and Codonopsis spp. with stimulating effect on the nervous system were isolated and studied. The flora of the Kazakh SSR numbered .apprx. 200 spp. of MP but only 50 were

exploited. Therefore the creation of an MP atlas for the Kazakh SSR was considered necessary.

L10 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1980:143262 CAPLUS
DOCUMENT NUMBER: 92:143262
TITLE: Isolation and structure determination of naturally occurring sesquiterpene lactone from Compositae
AUTHOR(S): Rustaiyan, Abdolhossein; Niknejad, Akram; Nazarians, Lilly
CORPORATE SOURCE: Cent. Org. Chem. Res., Natl. Univ. Iran, Iran
SOURCE: Pazhoohandeh (Tehran) (1978), 21, 183-201
CODEN: PZHHDR
DOCUMENT TYPE: Journal
LANGUAGE: Persian
AB In a detailed study of structure and chemical transformation of naturally occurring terpene derivs., particularly sesquiterpene lactones, from Compositae, a new compound of this type (dihydroelephantopin, I) was isolated from Elephantopus tomentosus. I exhibited **tumor** -inhibiting activity in preliminary tests against leukemia **tumor** cells (PS-type). Carthamus oxyacantha Yielded a sesquiterpene glycoside, not further identified; Achillea eriphora yielded a guaianolide-type sesquiterpene lactone, and Thevenotia persica yielded the pentacyclic triterpenes β-amyrin and lupeol.

L10 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1932:34265 CAPLUS
DOCUMENT NUMBER: 26:34265
ORIGINAL REFERENCE NO.: 26:3571g-i
TITLE: Active sensitization of animals to chemically defined substances and substances of plant origin
AUTHOR(S): Stumpke, G.
SOURCE: Klinische Wochenschrift (1932), 11, 58-61
CODEN: KLWOAZ; ISSN: 0023-2173
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Guinea pigs can be sensitized by intradermal injections at 5-8 day intervals of various substances (exts. of chrysanthemum, tulip, jasmine, milfoil, primrose, cactus and elder, as well as turpentine and croton oil). Other plants (alpine violets, roses, geranium, etc.), and other chemical substances, such as neoarsphenamine, myosalvarsan, novasurol. were found to be inactive. Microscopically, a pos. reaction is characterized by vasodilatation, both of capillaries and veins, thrombosis in the smaller veins, small hemorrhages and comparatively little inflammatory reaction.

=> d his

(FILE 'HOME' ENTERED AT 15:35:15 ON 15 MAR 2004)

FILE 'BIOSIS, MEDLINE, CAPLUS, SCISEARCH, JICST-EPLUS, LIFESCI' ENTERED AT 15:36:07 ON 15 MAR 2004
L1 2355 S ACHILLEA MILLEFOLIUM OR YARROW
L2 28 S L1 AND (METHANOL?)
L3 1 S L2 AND (ANTICANCER? OR ANTI-CANCER? OR ANTI-TUMOUR? OR ANTIT
L4 24 S L1 AND (ANTICANCER? OR ANTI-CANCER? OR ANTI-TUMOUR? OR ANTITU
L5 17 DUP REM L4 (7 DUPLICATES REMOVED)
L6 104 S L1 AND (ALCOHOL?)
L7 91 DUP REM L6 (13 DUPLICATES REMOVED)
L8 1 S L7 AND (ANTICANCER? OR ANTI-CANCER? OR ANTI-TUMOUR? OR ANTIT
L9 19 S L1 AND (TUMOR? OR ANTI-TUMOROG? OR ANTITUMOROG? OR METAS? OR
L10 15 DUP REM L9 (4 DUPLICATES REMOVED)

```
=> s (milfoil staunch weed or nosebleed or soldier? herb or carpenter? wort or
thousand weed or woundwort or bloodwort or boomadaran or knight? milfoil)
L11         240 (MILFOIL STAUNCH WEED OR NOSEBLEED OR SOLDIER? HERB OR CARPENTER
                ? WORT OR THOUSAND WEED OR WOUNDWORT OR BLOODWORT OR BOOMADARAN
                OR KNIGHT? MILFOIL)

=> s l11 and (tumor? or anti-tumorog? or antitumorog? or metas? or anti-metas? or
antimetas? or carcinog? or anticarcinogen? or anticarcinog?)
L12           6 L11 AND (TUMOR? OR ANTI-TUMOROG? OR ANTITUMOROG? OR METAS? OR
                ANTI-METAS? OR ANTIMETAS? OR CARCINOG? OR ANTICARCINOGEN? OR
                ANTICARCINOG?)

=> dup rem l12
PROCESSING COMPLETED FOR L12
L13           6 DUP REM L12 (0 DUPLICATES REMOVED)

=> d ibib abs l13 1-6

L13  ANSWER 1 OF 6  SCISEARCH  COPYRIGHT 2004 THOMSON ISI on STN
ACCESSION NUMBER:    2003:260743  SCISEARCH
THE GENUINE ARTICLE: 655PE
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L13 ANSWER 1 OF 6 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
ACCESSION NUMBER: 2003:260743 SCISEARCH
THE GENUINE ARTICLE: 655PE
TITLE: Plasma cell myeloma producing IgG, IgM, and IgA immunoglobulins in a cow
AUTHOR: Kameyama M (Reprint); Ishikawa Y; Shibahara T; Kadota K
CORPORATE SOURCE: Himeji Livestock Hyg Serv Ctr, 2-10-16 Taderahigashi, Himeji, Hyogo 6700081, Japan (Reprint); Himeji Livestock Hyg Serv Ctr, Himeji, Hyogo 6700081, Japan; Natl Inst Anim Hlth, Hokkaido Res Stn, Sapporo, Hokkaido 0620045, Japan
COUNTRY OF AUTHOR: Japan
SOURCE: JOURNAL OF VETERINARY DIAGNOSTIC INVESTIGATION, (MAR 2003) Vol. 15, No. 2, pp. 166-169.
Publisher: AMER ASSOC VETERINARY LABORATORY DIAGNOSTICIANS INC, PO BOX 1522, TURLOCK, CA 95381 USA.
ISSN: 1040-6387.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 17
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB A diagnosis of plasma cell myeloma was made in a 6-year-old Holstein cow that showed continuous **nosebleed**, progressing emaciation, and hyperglobulinemia. Necropsy revealed enlargement of the caudal mesenteric lymph nodes. Lymph nodes and spleen were infiltrated by neoplastic plasma cells. Renal lymph nodes, bone marrow, and kidneys also were affected. Amyloid-like material that was negative for Congo red was present in most of the affected lymph nodes. Congo red-positive amyloid material was noted in spleen, kidneys, liver, and adrenal glands. Neoplastic plasma cells exhibited immunohistochemical reactions for lambda-light chain and 3 classes of heavy chain but not for kappa-light chain. Nonamyloid deposits were labeled with antisera against lambda-light chain and heavy chains. Plasmacytoid cells, which stained positively for IgG, IgM, or IgA, were intermingled in all lesions. Production of 3 types of immunoglobulins may be caused by heavy-chain class switching, constantly occurring in certain proportions.

L13 ANSWER 2 OF 6 JICST-EPlus COPYRIGHT 2004 JST on STN
ACCESSION NUMBER: 1020323217 JICST-EPlus
TITLE: Three Cases of Olfactory Neuroblastoma.
AUTHOR: MOCHIGI SHIGEKI; MURAKAWA TETSUYA; NAKANOBOU MANABU; FURUKAWA TAICHI; KONO NAOYUKI; KITAHARA SATOSHI
CORPORATE SOURCE: Natl. Def. Med. Coll.
SOURCE: Jibi Inkoka Rinsho (Practica Otologica (Kyoto)), (2002) vol. 95, no. 4, pp. 349-353. Journal Code: G0710A (Fig. 7, Ref. 19)
CODEN: JIBIAG; ISSN: 0032-6313
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Short Communication
LANGUAGE: Japanese
STATUS: New

AB Olfactory neuroblastoma (esthesioneuroblastoma) is a rare carcinoma arising from the epithelium. To date eighty cases have been reported in the Japanese literature, and we report here three cases of olfactory neuroblastoma. Case 1, a 67-year-old male presented with a **nosebleed** and magnetic resonance imaging revealed a mass in the nasal cavity that infiltrated intracranially. Skull base surgery and craniofacial resection were performed, but the patient died of brain **metastasis** two and a half years later. Case 2, a 45-year-old male presented with epistaxis and computed tomography revealed **tumor** invading the anterior cranialfossa. En bloc resection of the skull base was performed with subsequent radiotherapy chemotherapy (carboplatin). Neck dissection was required later for cervical **metastasis** but the patient is still alive six years after neck dissection. Case 3, a

69-year-old female presented with nasal obstruction. The **tumor** was limited to the nasal cavity and surgical extirpation by lateral rhinotomy was performed. The patient is still alive two years postoperatively with no evidence of local recurrence or **metastasis**. (author abst.)

L13 ANSWER 3 OF 6 MEDLINE on STN
ACCESSION NUMBER: 2001070076 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11142789
TITLE: [Nasal leiomyosarcoma].
Leiomiosarcoma nasal.
AUTHOR: Santa Cruz Ruiz S; Del Canizo Alvarez A; De Prado San Jose M M; Flores Corral T
CORPORATE SOURCE: Servicio de ORL y Patologia Cervico-Facial, Hospital Clinico de Salamanca.
SOURCE: Acta otorrinolaringologica espanola, (2000 Aug-Sep) 51 (6) 515-7.
Journal code: 14540260R. ISSN: 0001-6519.
PUB. COUNTRY: Spain
DOCUMENT TYPE: (CASE REPORTS)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Spanish
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200101
ENTRY DATE: Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20010104
AB Leiomyosarcoma is an infrequent soft-tissue **tumor** that generally occurs in the myometrium and gastrointestinal tract. Primary **tumors** of the veins are unusual and generally occur in the inferior vena cava and only exceptionally in peripheral veins, such as the jugular or its branches. We report a case of leiomyosarcoma located in the left inferior turbinate. The 87 year-old male patient presented nasal obstruction and recurrent **nosebleed**. He had pulmonary and mediastinal **metastases** at the time of diagnosis.

L13 ANSWER 4 OF 6 JICST-EPlus COPYRIGHT 2004 JST on STN
ACCESSION NUMBER: 990762307 JICST-EPlus
TITLE: A Clinical Treatise upon the Nasal Septal Perforation.
AUTHOR: TANUMA FUMI; MISHIMA HARUTO; KASE YASUHIRO; IINUMA TOSHITAKA
CORPORATE SOURCE: Saitama Med. Sch.
SOURCE: Nippon Jibi Inkoka Gakkai Kaiho (Journal of Otolaryngology of Japan), (1999) vol. 102, no. 7, pp. 878-882. Journal Code: Z0669A (Tbl. 11, Ref. 12)
ISSN: 0030-6622
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: Japanese
STATUS: New
AB Thirty nine cases of septal perforation of various origins were presented using clinical such as backgrounds age, gender, possible causes, and size of septal perforation evaluated by diameter. The cases included 26 males and 13 females with a mean age of 35 years range: 8 to 85 years. Possible causative factors were as follows: septal surgeries (9), other nasal and paranasal surgeries (17), nasal cautery or tamponade (2), occupational (2), collagen disease (2), inflammatory (1) and idiopathic (5). Signs and symptoms related to perforations were minor, such as stuffy nose (3), running nose (3), **nosebleed** (5), dry sensation (4), nasal pain (1), and asymptomatic (23). Sizes of perforations by largest diameter were small (less than 10mm) in 7, modrate (11-20mm) in 13, and large (more than 21mm) in 6. The size of perforations tended to be variable, but two cases with collagen disease showed large perforations 35mm. Although iatrogenic and idiopathic cases comprised the majority of cases (80%), such a few

cases of grave significases as collagen and hematological diseases showed unusually large perforations. (author abst.)

L13 ANSWER 5 OF 6 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1992:98661 BIOSIS
DOCUMENT NUMBER: PREV199293055211; BA93:55211
TITLE: JUVENILE NASOPHARYNGEAL ANGIOFIBROMA EFFECT OF PREOPERATIVE ANGIOGRAPHIC EMBOLIZATION BLUNT DISSECTION AND TWISTING THE STEM OF THE **TUMOR**.
AUTHOR(S): IGUCHI Y [Reprint author]; SHITARA T; TAKAHASHI H; OKAMOTO M; YAO K; KANEKO I; NISHIYAMA K
CORPORATE SOURCE: KITASATO UNIV SCH MED
SOURCE: Practica Otologica Kyoto, (1991) Vol. 84, No. 9, pp. 1225-1231.
ISSN: 0032-6313.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: JAPANESE
ENTRY DATE: Entered STN: 12 Feb 1992
Last Updated on STN: 12 Feb 1992

AB Angiofibroma of the nasopharynx is almost always, but not exclusively, seen in adolescent males. These lesions are histologically benign, but regarded as malignant **tumors** clinically because of severe nosebleeds and progressive growth in the nasopharynx. Two patients with juvenile nasopharyngeal angiofibroma are described in this paper. Preoperative angiographic embolization and total removal of the **tumor** by twisting the stem was successfully performed in both cases. The effect of preoperative embolization of the perfusing artery of the **tumor** through angiography and surgical therapy are discussed in comparison with the other patients treated in our hospital. Blunt dissection and twisting off the **tumor** are effective if the **tumor** has a stem. Embolization of the perfusing artery is considered to be necessary before surgical removal when the **tumor** has a wide base, in which case removal of the **tumor** by twisting the stem is not possible.

L13 ANSWER 6 OF 6 MEDLINE on STN
ACCESSION NUMBER: 80231148 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7392637
TITLE: Renal cell carcinoma presenting as epistaxis.
AUTHOR: Kathuria S; Molnar Z; Reyes C V
SOURCE: Journal of surgical oncology, (1980) 14 (2) 153-7.
Journal code: 0222643. ISSN: 0022-4790.
PUB. COUNTRY: United States
DOCUMENT TYPE: (CASE REPORTS)
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198009
ENTRY DATE: Entered STN: 19900315
Last Updated on STN: 19900315
Entered Medline: 19800926

AB A case of renal cell carcinoma presenting as a **nosebleed** of three-week duration is described. Light microscopy of a nasal lesion showed a richly vascular **tumor**, forming glands and uniformly consisting of clear cells. Cytochemically and ultrastructurally, the presence of abundant lipid droplets and glycogen within the neoplastic cells indicated a renal origin. An extended clinical search for a primary kidney **tumor** was undertaken in view of a negative intravenous tomographic pyelography and renal scan findings. An angiogram finally revealed an intrarenal mass which was proven pathologically as a renal cell carcinoma.

L19 ANSWER 1 OF 11 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 2003:464330 BIOSIS
DOCUMENT NUMBER: PREV200300464330
TITLE: Antioxidant and antimicrobial activity of the essential oil and **methanol extracts** of **Achillea millefolium** subsp. millefolium Afan. (Asteraceae).
AUTHOR(S): Candan, Ferda [Reprint Author]; Unlu, Mehmet; Tepe, Bektas; Daferera, Dimitra; Polissiou, Moschos; Sokmen, Atalay; Akpulat, H. Askin
CORPORATE SOURCE: Department of Chemistry, Faculty of Science and Literature, Cumhuriyet University, Sivas, 58140, Turkey
candan@cumhuriyet.edu.tr
SOURCE: Journal of Ethnopharmacology, (August 2003) Vol. 87, No. 2-3, pp. 215-220. print.
ISSN: 0378-8741 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 8 Oct 2003
Last Updated on STN: 8 Oct 2003

AB The in vitro antimicrobial and antioxidant activities of the essential oil and **methanol extracts** of **Achillea millefolium** subsp. millefolium Afan. (Asteraceae) were investigated. GC-MS analysis of the essential oil resulted in the identification of 36 compounds constituting 90.8% of the total oil. Eucalyptol, camphor, alpha-terpineol, beta-pinene, and borneol were the principal components comprising 60.7% of the oil. The oil strongly reduced the diphenylpicrylhydrazyl radical (IC50=1.56 mug/ml) and exhibited hydroxyl radical scavenging effect in the Fe3+-EDTA-H2O2 deoxyribose system (IC50=2.7 mug/ml). It also inhibited the nonenzymatic lipid peroxidation of rat liver homogenate (IC50=13.5 mug/ml). The polar phase of the extract showed antioxidant activity. The oil showed antimicrobial activity against Streptococcus pneumoniae, Clostridium perfringens, Candida albicans, Mycobacterium smegmatis, Acinetobacter lwoffii and Candida krusei while water-insoluble parts of the **methanolic** extracts exhibited slight or no activity. This study confirms that the essential oil of Achillea millefolium possesses antioxidant and antimicrobial properties in vitro.

L19 ANSWER 2 OF 11 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1999:376457 BIOSIS
DOCUMENT NUMBER: PREV199900376457
TITLE: Attraction of Culex pipiens pipiens (Diptera: Culicidae) to flower volatiles.
AUTHOR(S): Mauer, Daniel J. [Reprint author]; Rowley, Wayne A.
CORPORATE SOURCE: Forest Glen Section, Defense Pest Management Information Analysis Center, Armed Forces Pest Management Board, Walter Reed Army Medical Center, Washington, DC, 20307-5001, USA
SOURCE: Journal of Medical Entomology, (July, 1999) Vol. 36, No. 4, pp. 503-507. print.
CODEN: JMENA6. ISSN: 0022-2585.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 9 Sep 1999
Last Updated on STN: 9 Sep 1999

AB Methylene chloride **extracts** of flowers from 4 plants (common milkweed, Asclepias syriaca L.; ox-eye daisy, Leucanthemum vulgare Lamarck; Canada goldenrod, Solidago canadensis L.; and **yarrow**, **Achillea millefolium** L.) were tested in a dual-port olfactometer for attractiveness to female northern house mosquitoes, Culex pipiens pipiens L. Fifty milligrams of **extract** was used for each test, which was equivalent to the amount of **extract** from flowers of 0.58 common milkweed inflorescences, 1.75 ox-eye daisy flower

heads, 0.33 Canada goldenrod plants, or 3.14 **yarrow** plants. Significantly more Cx. pipiens responded to the common milkweed flower extract than to a control. Ox-eye daisy, Canada goldenrod and **yarrow** flower **extracts** were not significantly attractive to this species. A headspace sample of the common milkweed extract was collected by solid phase micro-extraction and analyzed by gas chromatography-mass spectrometry. The most abundant compounds in the headspace sample were2-phenylethanol and benzyl **alcohol**. Analysis of the common milkweed extract and standards of 2-phenylethanol and benzyl **alcohol** by gas chromatography-flame ionization detection confirmed that these compounds were present in the extract. Cx. pipiens did not respond to synthetic blends of these 2 compounds when tested in a dual-port olfactometer.

L19 ANSWER 3 OF 11 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1991:156361 BIOSIS
DOCUMENT NUMBER: PREV199191082161; BA91:82161
TITLE: ANTISTAPHYLOCOCCAL PROPERTIES OF SOME PLANT EXTRACTS IN VIEW OF USING THESE EXTRACTS IN THE TREATMENT AND PREVENTION OF SKIN DISEASES.
AUTHOR(S): MOLOCHKO V A [Reprint author]; LASTOCHKINA T M; KRYLOV I A; BRANGULIS K A
CORPORATE SOURCE: DIV MICROBIOL, MINSK MED INST, MINSK, USSR
SOURCE: Vestnik Dermatologii i Venerologii, (1990) No. 8, pp. 54-56.
CODEN: VDVEAV. ISSN: 0042-4609.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: RUSSIAN
ENTRY DATE: Entered STN: 1 Apr 1991
Last Updated on STN: 1 Apr 1991
AB Antistaphylococcal activities of plant extracts (12 water **alcohol** glycerol, WAG, 6 water **alcohol**, WA, 8 **alcohol** glycerol, AG, extracts) towards reference strains and those isolated from patients with pyoinflammatory diseases of the skin were examined by diluting the preparations in solid media. The strains under study were 69 S. aureus, 44 S. epidermidis, and 2 S. saprophyticus ones. Fifteen plant extracts have shown antistaphylococcal activities. The most active were oak bark, sage and St. John's wort grass. WAG **extracts**, horse radish root and leaf AG **extracts**, celandine grass WA **extract**; bur marigold and **yarrow** grass WA **extracts** were active towards S. aureus. S. aureus strains isolated from patients were found less sensitive to oak bark, German camomile flower WAG and celandine, but marigold, and brewing waste WA extracts that the reference strains, S. epidermidis strains isolated from patients with acne rash were less sensitive to sweet flag rhizome WAG, celandine and brewing waste WA extracts that the reference strains. These data may be useful when developing compositions including plant extracts for patients with skin diseases.

L19 ANSWER 4 OF 11 MEDLINE on STN
ACCESSION NUMBER: 2001511538 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11558643
TITLE: Final report on the safety assessment of **Yarrow** (**Achillea millefolium**) **Extract**.
AUTHOR: Anonymous
SOURCE: International journal of toxicology, (2001) 20 Suppl 2 79-84. Ref: 31
Journal code: 9708436. ISSN: 1091-5818.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English

FILE SEGMENT: Priority Journals
ENTRY MONTH: 200201
ENTRY DATE: Entered STN: 20010918
Last Updated on STN: 20020128
Entered Medline: 20020123

AB **Yarrow** (**Achillea Millefolium**) **Extract** is an **extract** of the **yarrow** plant, **Achillea millefolium**, supplied in polypropylene glycol, which is reported to function as a "biological additive" in cosmetic products. Sesquiterpene lactones, polyacetylenes, simple coumarins, and flavonoids have been identified among the many components of A. millefolium. **Yarrow Extract** was reportedly used in 65 cosmetic formulations. Historically, **Yarrow** (**Achillea Millefolium**) **Extract** was reported to be used at concentrations of < or =25%, but recent data indicate that this ingredient is supplied with actual **Yarrow** (**Achillea Millefolium**) **Extract** content of 2% to 25% and used at concentrations of 0.5% to 10%. Only limited toxicity data were available. Guinea pigs were sensitized to crude extracts of the whole plant and the flowers of A. millefolium. A. millefolium tea was weakly genotoxic in a somatic mutation and recombination test using Drosophila melanogaster. In clinical testing, product formulations containing 0.1% to 0.5% of ingredient that actually contained 2% of **Yarrow Extract** were generally not irritating. In provocative testing, patients reacted to a Compositae mix that contained yarrow, as well as to yarrow itself. Also in clinical testing, a formulation containing 0.1% **Yarrow** (**Achillea Millefolium**) **Extract** (2% **Yarrow** in propylene glycol and water) was not a sensitizer in a maximization test and **alcoholic extracts** of dried leaves and stalks of A. millefolium did not produce a phototoxic response. These data were not considered sufficient to support the safety of this ingredient in cosmetics. The types of data (all testing is to be performed on cosmetic-grade ingredients) still required include (1) ultraviolet (UV) absorption data, if absorption occurs in the UVA or UVB range, photosensitization data are needed; (2) gross pathology and histopathology in skin and other major organ systems associated with repeated exposures; (3) reproductive and developmental toxicity data; (4) two genotoxicity studies, one using a mammalian system, if positive, a 2-year dermal carcinogenicity assay performed using National Toxicology Program (NTP) methods may be needed; and (5) clinical sensitization testing at maximum concentration of use. In the absence of these data, it was concluded that the available data are insufficient to support the safety of **Yarrow** (**Achillea Millefolium**) **Extract** for use in cosmetic products.

L19 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:772270 CAPLUS
DOCUMENT NUMBER: 135:287926
TITLE: Dietetic beverage base prepared by hydrolysis of plant materials in the presence of aspartame
INVENTOR(S): Filonova, G. L.; Shevyrev, N. S.; Litvinova, E. A.; Kovaleva, I. L.; Postnikov, V. I.; Fedorova, O. V.; Polukhina, S. M.; Butkova, O. L.; Subbotin, B. S.; Strelkov, V. N.; Kopylov, E. A.; Bondarenko, Yu. E.
PATENT ASSIGNEE(S): Kurskaya Biofabrika - Firma "Biok", Russia; Vserossiiskii Nauchno-Issledovatel'skii Institut Pivovarennoi, Bezalkogol'noi i Vinodel'cheskoi Promyshlennosti
SOURCE: Russ., No pp. given
CODEN: RUXXE7
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2151528	C1	20000627	RU 1999-105615	19990319

PRIORITY APPLN. INFO.: RU 1999-105615 19990319

AB A beverage base is produced by enzymic hydrolysis of a mixture of plant materials with an extractant that contains an artificial sweetener (preferably 0.038-0.040% aspartame). The hydrolyzate is separated from the solid phase and the liquid phase is **alcoholized**. The concentrated base is aged, filtered and used for beverage manufacture The beverage base contains the following **extractives**: sweet clover 2.900-3.000; thyme 0.550-0.590; **yarrow** 0.400-0.450; ginger 0.320-0.390; and aspartame 0.00140-0.00160 g/100 mL. The beverages have favorable organoleptic properties and improved stability in storage.

L19 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:152500 CAPLUS
DOCUMENT NUMBER: 134:198039
TITLE: Antineoplastic **extract** from **Achillea millefolium**
INVENTOR(S): Alaoui-Jamali, Moulay A.; Ghadirian, Parviz
PATENT ASSIGNEE(S): Centre for Translational Research in Cancer, Can.
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001013929	A1	20010301	WO 2000-CA949	20000817

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-149697P P 19990820

AB The present invention relates to isolated and purified plant exts. An isolated and purified extract from Achillea millefolium to treat and prevent cancer is described. The purified fractions were administered to animals in which cancer was induced. The fractions demonstrated antimetastatic activity. Mols. contained in the fractions may also be used to treat and prevent cancer. Dried A. millefolium was ground and extracted with MeOH for 48 h. The extract was purified by chromatog. The effectiveness of the extract in inhibiting the lung carcinoma was demonstrated.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:44599 CAPLUS
DOCUMENT NUMBER: 134:70661
TITLE: Preserving and flavoring agent and method of its preparation
INVENTOR(S): Dziala, Gabriela; Peplonski, Ryszard; Klopotek, Alojzy; Lisicki, Zygmunt; Tecza, Witold
PATENT ASSIGNEE(S): Instytut Chemii Przemyslowej im.Prof.Ignacego Moscickiego, Pol.
SOURCE: Pol., 6 pp.
CODEN: POXXA7

DOCUMENT TYPE: Patent
LANGUAGE: Polish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PL 178470	B1	20000531	PL 1995-308801	19950526

PRIORITY APPLN. INFO.: PL 1995-308801 19950526

AB The agent is made from Achillea millefolium extract which contains 25-28% Et pentadecanoate, 22-25% Me 6,9-octadecadienoate, 12-15% Me linolenate, 8,11,14-eicosatrienoic acid, 5-7% azulenes, 1.5-2.5% α- and β-caryophyllene, 0.8-1.5% α-bisabolol, 0.5-1.0% cadinene, 1.8-2.4% β-citronellol, 1.2-1.6% borneol, 0.6-1.0% α-terpineol, 0.2-0.5% camphor, 0.2-3.5% 1,8-cineol, and other minor substances. The A. millefolium dry plant material is extracted with supercrit. CO2 with the addition of 1-15% adjuvant agents (**methanol**, ethanol, isopropanol, tert-Bu acetate, acetone), at 8-30 MPa (best 10-20 MPa) and 20-100°C (best 40-60°C). The flow of CO2 with the adjuvant agent and plant extract is allowed to expand to the atmospheric pressure and the adjuvant agent is removed by distillation The antimicrobial effects of the extract were tested against Escherichia coli and Staphylococcus aureus. The anal. of heavy metals (Hg, As, Pb, Cd) in the plant material and extract indicated that very small amts. of metals appear in the supercrit. extract (unlike in the classical Soxhlet extract with ethanol, where the As content actually increased compared to dry herb material). The extract has favorable aromatic and antimicrobial properties and could be used in dairy and meat products to increase their shelf-life and improve their flavor.

L19 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1991:128769 CAPLUS
DOCUMENT NUMBER: 114:128769
TITLE: **Extraction** and GC/MS analysis of the essential oil of **Achillea millefolium** L. complex (Compositae)
AUTHOR(S): Hachey, Jean Marie; Collin, Guy J.; Gagnon, Michel J.; Simard, Sandra; Dufour, Sylvain; Jean, France Ida; Vernin, Gaston; Fraisse, Daniel
CORPORATE SOURCE: Dep. Sci. Fondam., Univ. Quebec, Chicoutimi, QC, G7H 2B1, Can.
SOURCE: Journal of Essential Oil Research (1990), 2(6), 317-26
CODEN: JEOREG; ISSN: 1041-2905
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The essential oil, which was obtained by hydrodistn. from aerial parts of A. millefolium complex (Compositae), was analyzed using both GC/MS and Kovat's indexes. The major components extracted from the stems, leaves, and inflorescences were β-thujone (8.3-21.7%), camphor (8.6-11.7%), 1,8-cineole (7.7-15.2%), β-pinene (3.8-7.8%), and sabinene (5.7-8.9%). More than 60 components were identified; 40 of which, mainly oxygenated compds., are reported for the first time. Variations in the essential oil composition and yield during hydrodistn. are also reported.

L19 ANSWER 9 OF 11 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
ACCESSION NUMBER: 2001:119969 SCISEARCH
THE GENUINE ARTICLE: 397KP
TITLE: Solid-phase microextraction of volatile components from natural grassland plants
AUTHOR: Cornu A (Reprint); Carnat A P; Martin B; Coulon J B; Lamaison J L; Berdague J L
CORPORATE SOURCE: INRA Theix, Unite Rech Herbivores, F-63122 St Genes

Champanelle, France (Reprint); Fac Pharm, Lab Pharmacognosie & Phytotherapie, F-63000 Clermont Ferrand, France; INRA Theix, Rech Viande Stn, F-63122 St Genes Champanelle, France
COUNTRY OF AUTHOR: France
SOURCE: JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, (JAN 2001) Vol. 49, No. 1, pp. 203-209.
Publisher: AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036 USA.
ISSN: 0021-8561.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 26

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB The volatile components from nine plants growing on natural grasslands in Auvergne, central France, selected fdr the broad qualitative and quantitative diversity of their terpenoid fractions, were analyzed by high-resolution gas-phase chromatography and mass spectrometry (HRGC-MS) after static headspace solid-phase microextraction (SHS-SPME). SHS-SPME allowed all the plant material to be analyzed under the same conditions despite its wide-ranging composition. This is not always possible with other **extraction** methods. Using an apolar poly(dimethylsiloxane) (PDMS) phase, numerous terpenoid hydrocarbons, together with **alcohols**, cyclic ethers, and esters, were **extracted**. Its ease of use and the high resolution of the chromatographic profiles obtained make SHS-SPME well suited to the rapid characterization of the main components of the volatile fraction of plants. Of the nine plants studied, four (Meum athamanticum, Pimpinella saxifraga, **Achillea millefolium**, and Thymus pubegioides) exhaled more than 60 different volatile components. Certain terpenes present in large amounts in these plants might help link dairy products to grazing pasture.

L19 ANSWER 10 OF 11 JICST-EPlus COPYRIGHT 2004 JST on STN
ACCESSION NUMBER: 920274359 JICST-EPlus
TITLE: Inhibitory Effect of Plant Extracts on Degranulation and Histamine Release from Purified Rat Mast Cells.
AUTHOR: TSUJI TOSHIHIKO; ISHIKAWA KEIJI
SHIBATA TADAYOSHI
CORPORATE SOURCE: Oparukeshohinhonpo
Osaka Prefect. Inst. of Public Health
SOURCE: Nippon Keshohin Gijutsusha Kaishi (Journal of SCCJ), (1992) vol. 25, no. 4, pp. 246-253. Journal Code: S0078A (Fig. 23, Tbl. 1, Ref. 7)
ISSN: 0387-5253
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: Japanese
STATUS: New
AB The type I allergy which couses certain symptoms such as asthma, hay fever, and rhinitis is the most common. The pathological mechanism had been explained in terms of the histamine-releasing reaction and degramulation of mast cells. It has been said that plant **extracts** are useful for-skin. However, anti-inflammatory activity and anti-allergic activity have been unknown. Therefore, the inhibitory effect of **extracts** from seven kinds of plants (Equisetum arvense L., Tilia eurropaea L., Eucalyptus globulus L., **Achillea millefolium** L., Rosmarinus officinalis L., Salvia officinalia L., Matricaria chamomilla L.) on degranulation and histamine release from rat mast cells induced by antigen-IgE antibody reaction or compound 48/80 were investigated in vitro. All of the **extracts** were prepared with water or methyl **alcohol**. As the results, Eucalyptus globulus L., **Achillea millefolium** L., and Rosmarinus officinalis L. showed significant inhibitory effects on histamine release induced by antigen (DNP-As). And then, Eucalyptus globulus L., Salvia officinalia L., Rosmarinus officinalis L., and Tilia europaea L. showed significant inhibitory effects on histamine release induced by compound 48/80. Among the tested **extracts** of plants, Eucalyptus globulus L. showed the strongest inhibitory effects of degranulation and histamine release from mast cells induced by antigen as well as by compound 48/80. Usage of the plants **extracts** were suggested for new anti-inflammatory agents and anti-allergic agents. (author abst.)

L19 ANSWER 11 OF 11 LIFESCI COPYRIGHT 2004 CSA on STN
ACCESSION NUMBER: 2002:35891 LIFESCI
TITLE: Final Report on the Safety Assessment of **Yarrow** (**Achillea Millefolium**) **Extract**
AUTHOR: Fiume, M.Z.
CORPORATE SOURCE: Cosmetic Ingredient Review, 1101 17th Street, NW, Suite 310, Washington, DC 20036, USA
SOURCE: International Journal of Toxicology [Int. J. Toxicol.], (20010000) vol. 20, Suppl. 2, pp. 79-84.
ISSN: 1091-5818.
DOCUMENT TYPE: Journal
FILE SEGMENT: X; Z
LANGUAGE: English
SUMMARY LANGUAGE: English
AB **Yarrow** (**Achillea Millefolium**) **Extract** is an **extract** of the **yarrow** plant, **Achillea millefolium**, supplied in polypropylene glycol, which is reported to function as a "biological additive" in cosmetic products. Sesquiterpene lactones, polyacetylenes, simple coumarins, and flavonoids have been identified among the many components of A. millefolium. **Yarrow Extract** was reportedly used in 65 cosmetic formulations. Historically, **Yarrow** (**Achillea Millefolium**) **Extract** was reported to be used at

concentrations of less than or equal to 25%, but recent data indicate that this ingredient is supplied with actual **Yarrow (Achillea Millefolium) Extract** content of 2% to 25% and used at concentrations of 0.5% to 10%. Only limited toxicity data were available. Guinea pigs were sensitized to crude **extracts** of the whole plant and the flowers of A. millefolium. A. millefolium tea was weakly genotoxic in a somatic mutation and recombination test using Drosophila melanogaster. In clinical testing, product formulations containing 0.1% to 0.5% of ingredient that actually contained 2% of **Yarrow Extract** were generally not irritating. In provocative testing, patients reacted to a Compositae mix that contained **yarrow**, as well as to **yarrow** itself. Also in clinical testing, a formulation containing 0.1% **Yarrow (Achillea Millefolium) Extract** (2% **Yarrow** in propylene glycol and water) was not a sensitizer in a maximization test and **alcoholic extracts** of dried leaves and stalks of A. millefolium did not produce a phototoxic response. These data were not considered sufficient to support the safety of this ingredient in cosmetics. The types of data (all testing is to be performed on cosmetic-grade ingredients) still required include (1) ultraviolet (UV) absorption data, if absorption occurs in the UVA or UVB range, photosensitization data are needed; (2) gross pathology and histopathology in skin and other major organ systems associated with repeated exposures; (3) reproductive and developmental toxicity data; (4) two genotoxicity studies, one using a mammalian system, if positive, a 2-year dermal carcinogenicity assay performed using National Toxicology Program (NTP) methods may be needed; and (5) clinical sensitization testing at maximum concentration of use. In the absence of these data, it was concluded that the available data are insufficient to support the safety of **Yarrow (Achillea Millefolium) Extract** for use in cosmetic products.

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=> dup rem l18
PROCESSING COMPLETED FOR L18
L21          84 DUP REM L18 (0 DUPLICATES REMOVED)

=> d ti l21 1-40

L21  ANSWER 1 OF 84  BIOSIS  COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
TI   Preliminary screening study of reproductive outcomes after exposure to
     yarrow in the pregnant rat.

L21  ANSWER 2 OF 84      MEDLINE on STN
TI   Glutathione S-transferases and malondialdehyde in the liver of NOD mice on
     short-term treatment with plant mixture extract P-9801091.
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L21 ANSWER 3 OF 84 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 2003:464330 BIOSIS
DOCUMENT NUMBER: PREV200300464330
TITLE: Antioxidant and antimicrobial activity of the essential oil and methanol **extracts** of **Achillea millefolium** subsp. millefolium Afan. (Asteraceae).
AUTHOR(S): Candan, Ferda [Reprint Author]; Unlu, Mehmet; Tepe, Bektas; Daferera, Dimitra; Polissiou, Moschos; Sokmen, Atalay; Akpulat, H. Askin
CORPORATE SOURCE: Department of Chemistry, Faculty of Science and Literature, Cumhuriyet University, Sivas, 58140, Turkey
candan@cumhuriyet.edu.tr
SOURCE: Journal of Ethnopharmacology, (August 2003) Vol. 87, No. 2-3, pp. 215-220. print.
ISSN: 0378-8741 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 8 Oct 2003
Last Updated on STN: 8 Oct 2003

AB The in vitro antimicrobial and antioxidant activities of the essential oil and methanol **extracts** of **Achillea millefolium** subsp. millefolium Afan. (Asteraceae) were investigated. GC-MS analysis of the essential oil resulted in the identification of 36 compounds constituting 90.8% of the total oil. Eucalyptol, camphor, alpha-terpineol, beta-pinene, and borneol were the principal components comprising 60.7% of the oil. The oil strongly reduced the diphenylpicrylhydrazyl radical (IC50=1.56 mug/ml) and exhibited hydroxyl radical scavenging effect in the Fe3+-EDTA-H2O2 deoxyribose system (IC50=2.7 mug/ml). It also inhibited the nonenzymatic lipid peroxidation of rat liver homogenate (IC50=13.5 mug/ml). The polar phase of the extract showed antioxidant activity. The oil showed antimicrobial activity against Streptococcus pneumoniae, Clostridium perfringens, Candida albicans, Mycobacterium smegmatis, Acinetobacter lwoffii and Candida krusei while water-insoluble parts of the methanolic extracts exhibited slight or no activity. This study confirms that the essential oil of Achillea millefolium possesses antioxidant and antimicrobial properties in vitro.

L21 ANSWER 6 OF 84 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
ACCESSION NUMBER: 2002:953921 SCISEARCH
THE GENUINE ARTICLE: 614WY
TITLE: Screening of some plants used in the Brazilian folk medicine for the treatment of infectious diseases
AUTHOR: Holetz F B; Pessini G L; Sanches N R; Cortez D A G; Nakamura C V; Dias B P (Reprint)
CORPORATE SOURCE: Univ Estadual Maringa, Dept Anal Clin, Av Colombo 5790, BR-87020900 Maringa, Parana, Brazil (Reprint); Univ Estadual Maringa, Dept Anal Clin, BR-87020900 Maringa, Parana, Brazil; Univ Estadual Maringa, Dept Farm & Farmacol, BR-87020900 Maringa, Parana, Brazil; Univ Estadual Maringa, Programa Posgrad Ciencias Farmaceut, BR-87020900 Maringa, Parana, Brazil
COUNTRY OF AUTHOR: Brazil
SOURCE: MEMORIAS DO INSTITUTO OSWALDO CRUZ, (OCT 2002) Vol. 97, No. 7, pp. 1027-1031.
Publisher: FUNDACO OSWALDO CRUZ, AV BRASIL 4365, 21045-900 RIO DE JANEIRO, RJ, BRAZIL.
ISSN: 0074-0276.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 28

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB **Extracts** of 13 Brazilian medicinal plants were screened for

their antimicrobial activity against bacteria and yeasts. Of these, 10 plant **extracts** showed varied levels of antibacterial activity. Piper regnellii presented a good activity against Staphylococcus aureus and Bacillus subtilis, a moderate activity on Pseudomonas aeruginosa, and a weak activity against Escherichia coli. Punica granatum showed good activity on S. aureus and was inactive against the other standard strains. Eugenia uniflora presented moderate activity on both S. aureus and E. coli. Psidium guajava, Tanacetum vulgare, Arctium lappa, Mikania glomerata, Sambucus canadensis, Plantago major and Erythrina speciosa presented some degree of antibacterial activity. Spilanthes acmella, Lippia alba, and **Achillea millefolium** were considered inactive. Five of the plant **extracts** presented compounds with Rf values similar to the antibacterial compounds visible on bioautogram. Of these, three plants belong to the Asteraceae family. This mal, mean that the same compounds are responsible for the antibacterial activity in these plants. Anticandidal activity was detected in nine plant **extracts** (P. guajava, E. uniflora, P. granatum, A. lappa, T. vulgare, M. glomerata, L. alba, P. regnellii, and P. major). The results might explain the ethnobotanical use of the studied species for the treatment of various infectious diseases.

L21 ANSWER 7 OF 84 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 2003:163021 BIOSIS
DOCUMENT NUMBER: PREV200300163021
TITLE: Sesquiterpenes and flavonoid aglycones from a Hungarian taxon of the Achillea millefolium group.
AUTHOR(S): Glasl, Sabine [Reprint Author]; Mucaji, Pavel; Werner, Ingrid; Presser, Armin; Jurenitsch, Johann
CORPORATE SOURCE: Pharma Center, Institute of Pharmacognosy, University of Vienna, Althanstrasse 14, A-1090, Vienna, Austria sabine.glasl@univie.ac.at
SOURCE: Zeitschrift fuer Naturforschung Section C Journal of Biosciences, (November-December 2002) Vol. 57, No. 11-12, pp. 976-982. print.
ISSN: 0939-5075.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 26 Mar 2003
Last Updated on STN: 26 Mar 2003

AB The investigation of a dichloromethane **extract** of flower heads of a Hungarian taxon of the **Achillea millefolium** group led to the isolation of three flavonoid aglycones, one triterpene, one germacranolide and five guaianolides. Their structures were elucidated by UV-VIS, EI- and CI-MS, 1H NMR and 13C NMR spectroscopic methods as well as by 2D-NMR studies and by selective 1D-NOE experiments. Besides apigenin, luteolin and centaureidin, beta-sitosterol, 3beta-hydroxy-11alpha,13-dihydro-costunolide, desacetylmatricarin, leucodin, achillin, 8alpha-angeloxy-leucodin and 8alpha-angeloxy-achillin were isolated. Both latter substances are reported here for the first time. Their NMR data were compared with those of the other guaianolides. The stereochemistry of 3beta-hydroxy-11alpha,13-dihydro-costunolide was discussed and compared with data of the literature.

L21 ANSWER 8 OF 84 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 2003:222280 BIOSIS
DOCUMENT NUMBER: PREV200300222280
TITLE: Effect of plant extracts used in folk medicine on cell growth and differentiation of Herpetomonas samuelpessoai (Kinetoplastida, Trypanosomatidae) cultivated in defined medium.
AUTHOR(S): Holetz, Fabiola Barbieri; Ueda-Nakamura, Tania; Dias Filho, Benedito Prado; Cortez, Diogenes Aparicio Garcia; Mello, Joao Carlos Palazzo; Nakamura, Celso Vataru [Reprint Author]

CORPORATE SOURCE: Departamento de Analises Clinicas, Universidade Estadual de Maringa, Av. Colombo, 5790, 87020-900, Maringa, Parana, Brazil
cvnakamura@uem.br
SOURCE: Acta Scientiarum Universidade Estadual de Maringa, (June 2002) Vol. 24, No. 3, pp. 657-662. print.
ISSN: 1415-6814 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 7 May 2003
Last Updated on STN: 7 May 2003

AB This work reports the effect of 15 medicinal plants on cell growth and differentiation of Herpetomonas samuelpessoai, a non-pathogenic trypanosomatid, used as biological model for its similar antigens to Trypanosoma cruzi. Crude extracts (1,000 mug/ml) or essential oil (250 mug/ml) were added in a defined medium. Cell growth was estimated by counting in Neubauer's chamber and cell differentiation was examined by light microscope. Ocimum gratissimum, Lippia alba, Piper regnellii, Stryphnodendron adstringens, and Tanacetum vulgare showed antiprotozoan activity, Psidium guajava and Punica granatum a lower activity and Achillea millefolium, Eugenia uniflora, Mikania glomerata, Plantago major, and Spilanthes acmella had no activity. In contrast, Arctium lappa, Erythrina speciosa, and Sambucus canadensis stimulated H. samuelpessoai growth. Only L. alba and S. acmella stimulated cell differentiation in this flagellate. These results indicate that medicinal plants possess active compounds against H. samuelpessoai. Thus, this protozoan seems to be a suitable model for screening plants containing trypanocidal drugs.

L21 ANSWER 9 OF 84 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:840191 CAPLUS
DOCUMENT NUMBER: 138:66642
TITLE: Biochemical investigation of **yarrow extracts** (**Achillea millefolium** L.)
AUTHOR(S): Popovic, M.; Jakovljevic, V.; Bursac, M.; Mitic, R.; Raskovic, A.; Kaurinovic, B.
CORPORATE SOURCE: Institute of Chemistry, Faculty of Sciences, University of Novi Sad, Yugoslavia
SOURCE: Oxidation Communications (2002), 25(3), 469-475
CODEN: OXCODW; ISSN: 0209-4541
PUBLISHER: SciBulCom Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Yarrow (Achillea millefolium L.) has been considered medicinal plant ever since in our folk medicine, and has been known also by European and Central Asian peoples. Its leaves (Millefolii folium), flowers (Millefolii flos) and whole plant (Millefolii herba) have been used as therapeutic agents. Yarrow has always been considered medically very effective as aromatic, tonic, stomatic, stimulant, antispasmodic, emetic, and antipyretic. It is also very effective against hemorrhoids, catarrh of stomach and intestines, malfunction of kidneys and liver, etc. Achillein was shown to exhibit hemostatic effects and the leaf extract diminishes the development of pathogens. Tannins and essential oils prevent festering of wounds, accelerate their healing, and decrease pain. Ethanol extract of yarrow (most active compds.: stahidrin and pyrocatechol) has repulsive effect on mosquitoes (Aedes aegypti L.), especially by larvicide effect. Other effects such as antihemorrhagic and sedative, tonic, antispasmodic, antipyretic, analgesic, astringent, carminative, diaphoretic, antimycotic and antineoplastic have been described. Pretreatment with exts. of Achillea millefolium leaves and flowers significantly reduced LPx values in liver homogenate. Combination of Achillea millefolium extract (leaves and flowers) and CCl4 also reduced LPx (compared to animals treated with CCl4, and even to untreated animals). As for CAT activity, extract of leaves reduced activity of CAT. It is interesting to point to the effect of

"intoxication" with CCl4 caused decrease of CAT, as did combination of Achillea millefolium exts. (leaves and flowers) and CCl4. Activity of XOD was enhanced upon administration of Achillea millefolium extract (leaves and flowers), while CCl4 had no effect on XOD activity, nor had combination of extract and CCl4. Content of GSH has not changed upon treatment with Achillea millefolium leaves and flowers extract, but it was statistically significantly reduced upon intoxication with CCl4 and with combination exts./CCl4, which points to important hepatoprotective role of GSH, i.e. its antioxidative activity. Activity of GSHPx was reduced in a very high degree in all cases of treatment with exts. alone or with combination of exts. and CCl4. LPx content was reduced after treatment with extract of Achillea millefolium leaves, and statistically very significantly enhanced after administration of CCl4. Combination of exts. of Achillea millefolium leaves and flowers also caused decrease of LPx compared to control (untreated animals) and to control with CCl4-pretreated animals. Extract of leaves had no effect on XOD activity alone or in combination with CCl4. Px was influenced only by treatment with CCl4, and Px activity was enhanced. Content of GSH was decreased in hemolyzate (as well as in liver homogenate) upon treatment with CCl4 and with combination of flower extract and CCl4. Activities of transminases (AST and ALT) were enhanced after treatment with CCl4, and with exts. of flowers and leaves in combination with CCl4.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 12 OF 84 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:626690 CAPLUS
TITLE: Content of some biologically active substances in the herb of Achillea millefolium growing in the Krasnoyarsk
AUTHOR(S): Shatilina, N. V.; Pervyshina, G. G.; Efremov, A. A.; Gordienko, G. P.; Agafonova, E. A.; Goncharov, D. V.
CORPORATE SOURCE: Krasnoyarsk. Gos. Torgovo-Ekon. Inst., Krasnoyarsk, 660049, Russia
SOURCE: Khimiya Rastitel'nogo Syr'ya (2002), (3), 13-16
CODEN: KRSHC4; ISSN: 1029-5151
PUBLISHER: Izdatel'stvo Altaiskogo Gosudarstvennogo Universiteta
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The contents of mineral elements, the quant. and qual. composition of **extractive** substances, essential oil of **Achillea Millefolium** were investigated.

L21 ANSWER 14 OF 84 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:152500 CAPLUS
DOCUMENT NUMBER: 134:198039
TITLE: Antineoplastic **extract** from **Achillea millefolium**
INVENTOR(S): Alaoui-Jamali, Moulay A.; Ghadirian, Parviz
PATENT ASSIGNEE(S): Centre for Translational Research in Cancer, Can.
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001013929	A1	20010301	WO 2000-CA949	20000817

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,

SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: US 1999-149697P P 19990820
AB The present invention relates to isolated and purified plant exts. An isolated and purified extract from Achillea millefolium to treat and prevent cancer is described. The purified fractions were administered to animals in which cancer was induced. The fractions demonstrated antimetastatic activity. Mols. contained in the fractions may also be used to treat and prevent cancer. Dried A. millefolium was ground and extracted with MeOH for 48 h. The extract was purified by chromatog. The effectiveness of the extract in inhibiting the lung carcinoma was demonstrated.
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 18 OF 84 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
ACCESSION NUMBER: 2001:362402 SCISEARCH
THE GENUINE ARTICLE: 426LF
TITLE: Effect of 'antidiabetis' herbal preparation on serum glucose and fructosamine in NOD mice
AUTHOR: Petlevski R (Reprint); Hadzija M; Slijepcevic M; Juretic D
CORPORATE SOURCE: Univ Zagreb, Fac Pharm & Biochem, Dept Med Biochem & Haematol, Domagojeva 2-3, Zagreb 10000, Croatia (Reprint); Univ Zagreb, Fac Pharm & Biochem, Dept Med Biochem & Haematol, Zagreb 10000, Croatia; Inst Rugjer Boskovic, Dept Mol Med, Zagreb, Croatia
COUNTRY OF AUTHOR: Croatia
SOURCE: JOURNAL OF ETHNOPHARMACOLOGY, (MAY 2001) Vol. 75, No. 2-3, pp. 181-184.
Publisher: ELSEVIER SCI IRELAND LTD, CUSTOMER RELATIONS MANAGER, BAY 15, SHANNON INDUSTRIAL ESTATE CO, CLARE, IRELAND.
ISSN: 0378-8741.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 11
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS
AB The antihyperglycemic effect of the Antidiabetis herbal preparation ((Myrtilli folium (Vaccinium myrtillus L.), Taraxaci radix (Taraxacum officinale Web.), Cichorii radix (Cichorium intybus L.), Juniperi fructus (Juniperus communis L.), Centaurii herba (Centaurium umbellatum Gilib.), Phaseoli pericarpium (Phaseolus vulgaris), Millefollii herba (**Achillea millefolium** L.), Morii folium (Morus nigra L.), Valeriane radix (Valleriana officinalis L.), Urticae herba et radix (Urtica dioica L.)), patent Number P-9801091 Zagreb, Croatia was investigated. Two **extracts** were prepared: ethanol **extract** (**extract** 1), and ethanol **extract** from which ethanol was evaporated on a rotatory evaporator at a temperature of 45 degreesC (**extract** 2). **Extract** 1 and **extract** 2 were administered tin experiment 1) to alloxan-induced non-obese diabetic (NOD) mice in the same dose of 20 mg/kg. Blood glucose was determined before, and 10, 30, 60 and 120 min after the preparation administration. **Extract** 1 and **extract** 2 decreased the level of blood glucose by 10 and 20%, respectively, of the initial value (at 0 min, mean = 22.6 +/- 8.3 mmol/l). Serum levels of glucose and fructosamine were determined in NOD mice, NOD mice administered **extract** 2 in a dose of 20 mg/kg of **extract** 2, and NOD mice administered acarbose in a dose of 25 mg/100 g chow, in order to verify the hypoglycemic action of **extract** 2 (in experiment 2). **Extract** 2 and acarbose were admired to the chow. The duration of treatment was 7 days. Significantly lower glucose ($P < 0.05$) and fructosamine ($P < 0.001$) levels were recorded in **extract** 2

treated NOD mice as compared with NOD mice. Study results showed **extract** 2 to significantly decrease the level of glucose and fructosamine in alloxan induced NOD mice. Our future studies will be focused on the search of active principles of the **extracts**. (C) 2001 Elsevier Science Ireland Ltd. All rights reserved.

L21 ANSWER 19 OF 84 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN
ACCESSION NUMBER: 2001:699960 SCISEARCH
THE GENUINE ARTICLE: 452ZA
TITLE: **Yarrow extract** decreases bleomycin-induced pulmonary fibrosis
AUTHOR: Hemmati A A (Reprint); Adinehvand A
CORPORATE SOURCE: Ahwaz Univ Med Sci, Sch Pharm, Ahwaz, Iran
COUNTRY OF AUTHOR: Iran
SOURCE: TOXICOLOGY, (8 JUL 2001) Vol. 164, No. 1-3, Supp. [S], pp. 117-117.
Publisher: ELSEVIER SCI IRELAND LTD, CUSTOMER RELATIONS MANAGER, BAY 15, SHANNON INDUSTRIAL ESTATE CO, CLARE, IRELAND.
ISSN: 0300-483X.
DOCUMENT TYPE: Conference; Journal
LANGUAGE: English
REFERENCE COUNT: 0

L21 ANSWER 20 OF 84 MEDLINE on STN
ACCESSION NUMBER: 2001511538 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11558643
TITLE: Final report on the safety assessment of **Yarrow** (**Achillea millefolium**) **Extract**.
AUTHOR: Anonymous
SOURCE: International journal of toxicology, (2001) 20 Suppl 2 79-84. Ref: 31
Journal code: 9708436. ISSN: 1091-5818.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200201
ENTRY DATE: Entered STN: 20010918
Last Updated on STN: 20020128
Entered Medline: 20020123

AB **Yarrow** (**Achillea Millefolium**) **Extract** is an **extract** of the **yarrow** plant, **Achillea millefolium**, supplied in polypropylene glycol, which is reported to function as a "biological additive" in cosmetic products. Sesquiterpene lactones, polyacetylenes, simple coumarins, and flavonoids have been identified among the many components of A. millefolium. **Yarrow Extract** was reportedly used in 65 cosmetic formulations. Historically, **Yarrow** (**Achillea Millefolium**) **Extract** was reported to be used at concentrations of < or =25%, but recent data indicate that this ingredient is supplied with actual **Yarrow** (**Achillea Millefolium**) **Extract** content of 2% to 25% and used at concentrations of 0.5% to 10%. Only limited toxicity data were available. Guinea pigs were sensitized to crude extracts of the whole plant and the flowers of A. millefolium. A. millefolium tea was weakly genotoxic in a somatic mutation and recombination test using Drosophila melanogaster. In clinical testing, product formulations containing 0.1% to 0.5% of ingredient that actually contained 2% of **Yarrow Extract** were generally not irritating. In provocative testing, patients reacted to a Compositae mix that contained yarrow, as well as to yarrow itself. Also in clinical testing, a formulation containing 0.1% **Yarrow** (

Achillea Millefolium) Extract (2% **Yarrow** in propylene glycol and water) was not a sensitizer in a maximization test and alcoholic **extracts** of dried leaves and stalks of A. millefolium did not produce a phototoxic response. These data were not considered sufficient to support the safety of this ingredient in cosmetics. The types of data (all testing is to be performed on cosmetic-grade ingredients) still required include (1) ultraviolet (UV) absorption data, if absorption occurs in the UVA or UVB range, photosensitization data are needed; (2) gross pathology and histopathology in skin and other major organ systems associated with repeated exposures; (3) reproductive and developmental toxicity data; (4) two genotoxicity studies, one using a mammalian system, if positive, a 2-year dermal carcinogenicity assay performed using National Toxicology Program (NTP) methods may be needed; and (5) clinical sensitization testing at maximum concentration of use. In the absence of these data, it was concluded that the available data are insufficient to support the safety of **Yarrow** (**Achillea Millefolium**) **Extract** for use in cosmetic products.

L21 ANSWER 22 OF 84 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 2001:424883 BIOSIS
DOCUMENT NUMBER: PREV200100424883
TITLE: Protective effect of some herbal medicine against oxidative hemolysis of human erythrocytes.
AUTHOR(S): Asgary, Seddigheh [Reprint author]; Naderi, Gholam-Ali [Reprint author]; Kelishadi, Roya [Reprint author]; Alighanadi, Ali-Reza; Golbon, Sima
CORPORATE SOURCE: Isfahan Cardiovascular Research Center, Isfahan, Iran
SOURCE: Journal of Molecular and Cellular Cardiology, (June, 2001) Vol. 33, No. 6, pp. A5. print.
Meeting Info.: XVII ISHR World Congress of the International Society for Heart Research. Winnipeg, Canada. July 06-11, 2001. International Society for Heart Research.
CODEN: JMCDAY. ISSN: 0022-2828.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 5 Sep 2001
Last Updated on STN: 22 Feb 2002

L21 ANSWER 31 OF 84 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 2001:392904 BIOSIS
DOCUMENT NUMBER: PREV200100392904
TITLE: Antibacterial activity of plant extracts and phytochemicals on antibiotic-resistant bacteria.
AUTHOR(S): Nascimento, Gislene G. F. [Reprint author]; Locatelli, Juliana; Freitas, Paulo C.; Silva, Giuliana L.
CORPORATE SOURCE: Faculdade de Ciencias da Saude, Universidade Metodista de Piracicaba, Piracicaba, SP, Brazil
ggfranco@unimep.br
SOURCE: Brazilian Journal of Microbiology, (October-December, 2000) Vol. 31, No. 4, pp. 247-256. print.
ISSN: 1517-8382.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 15 Aug 2001
Last Updated on STN: 22 Feb 2002
AB The antimicrobial activity of plant extracts and phytochemicals was evaluated with antibiotic susceptible and resistant microorganisms. In addition, the possible synergistic effects when associated with antibiotics were studied. **Extracts** from the following plants were utilized: Achillea millifolium (**yarrow**), Caryophyllus aromaticus (clove), Melissa offficinalis (lemon-balm), Ocimun basilucum (basil), Psidium sguajava (guava), Punica granatum (pomegranate),

Rosmarinus officinalis (rosemary), Salvia officinalis (sage), Syzygyum joabolanum (jambolan) and Thymus vulgaris (thyme). The phytochemicals benzoic acid, cinnamic acid, eugenol and farnesol were also utilized. The highest antimicrobial potentials were observed for the extracts of Caryophyllus aromaticus and Syzygyum joabolanum, which inhibited 64.2 and 57.1% of the tested microorganisms, respectively, with higher activity against antibiotic-resistant bacteria (83.3%). Sage and **yarrow extracts** did not present any antimicrobial activity. Association of antibiotics and plant extracts showed synergistic antibacterial activity against antibiotic-resistant bacteria. The results obtained with Pseudomonas aeruginosa was particularly interesting, since it was inhibited by clove, jambolan, pomegranate and thyme extracts. This inhibition was observed with the individual extracts and when they were used in lower concentrations with ineffective antibiotics.

L21 ANSWER 46 OF 84 JICST-EPlus COPYRIGHT 2004 JST on STN
ACCESSION NUMBER: 960724510 JICST-EPlus
TITLE: Evaluation of plant extracts on depigmentation effect in cultured B16 melanoma cells.
AUTHOR: OBAYASHI KEI; IWAMOTO ATSUHIRO; MASAKI HITOSHI
CORPORATE SOURCE: Noevir Co., Ltd., Shiga Cent. Res. Lab.
SOURCE: Nippon Keshohin Gijutsusha Kaishi (Journal of SCCJ), (1996) vol. 30, no. 2, pp. 153-160. Journal Code: S0078A (Fig. 6, Tbl. 2, Ref. 7)
ISSN: 0387-5253
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: Japanese
STATUS: New
AB In the view of tyrosinase synthesis, we established the evaluating method for the development of the agents, using mouse B16 melanoma cells. Furthermore, the inhibitory effects of plant **extracts** on tyrosinase specific activities in culture B16 melanoma cells were examined by using the evaluating method. **Achillea millefolium**, Artemisia capillaris, Eupatorium fortunei and Polygonum cuspidatum showed the higher inhibitory effects on tyrosinase among plant **extracts** tested. To clarify the location of the activities in such plant **extracts**, fractions which were **extracted** with different solvents such as hexane, ethyl acetate, acetone, ethanol and H2O, were examined on the inhibitory activity of tyrosinase. Achillea millefolum and Eupatorium fortunei showed the activities in the ethyl acetate or acetone-**extracted** fraction, and the hexane-**extracted** fraction of Artemisia capillaris gave the highest activity among all fractions. The inhibitory effects of Polygonum cuspidatum was observed in the ethanol-**extracted** fraction. (author abst.)

L21 ANSWER 52 OF 84 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1995:397176 BIOSIS
DOCUMENT NUMBER: PREV199598411476
TITLE: The extent of **extraction** of heavy metals from medicinal plant material **Achillea millefolium** L. and Glycyrrhiza uralensis Fisch. into infusions and decoctions.
AUTHOR(S): Gravel', I. V. [Reprint author]; Yakovlev, G. P.; Petrov, N. V.; Stulovskii, S. S.; Listov, S. A.
CORPORATE SOURCE: St. Petersburg Chem.-Pharm. Inst., St. Petersburg, Russia
SOURCE: Rastitel'nye Resursy, (1994) Vol. 30, No. 3, pp. 79-84. CODEN: RRESA8. ISSN: 0033-9946.
DOCUMENT TYPE: Article
LANGUAGE: Russian
ENTRY DATE: Entered STN: 13 Sep 1995
Last Updated on STN: 13 Sep 1995

L21 ANSWER 53 OF 84 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:831374 CAPLUS
DOCUMENT NUMBER: 123:265754
TITLE: MAP: Production of novel **extracts** from **Achillea millefolium**
AUTHOR(S): Jocelyn Pare, J. R.; Belanger, Jacqueline M. R.; Belanger, Andre; Onge Sigoulin, Lise St.; Dextraze, L.
CORPORATE SOURCE: R. R. E. T. C., Ottawa, ON, K1A 0H3, Can.
SOURCE: Rivista Italiana EPPOS (1993), 4(Spec. Num.), 707-12
CODEN: RIEPD7; ISSN: 0392-0445
PUBLISHER: Rivista Italiana EPPOS
DOCUMENT TYPE: Journal
LANGUAGE: French
AB The A. millefolium oil obtained by steam distillation is well-known for its deep blue color resulting from the presence of chamazulene as one of its constituents. The olfactive properties of the oil however, are less interesting; consequently the oil is of little value to the perfumers. Chamazulene itself is produced via a hydrolytic reaction of a lactone that occurs during the steam distillation process. A novel extract was obtained using the microwave-assisted process (MAP) on A. millefolium grown in Quebec (Canada), without the addition of any water. The MAP extract is produced very quickly and it offers an expanded range of fragrances. The treated plant material can be subsequently extracted a second time using conventional steam distillation and still yield a valuable deep blue extract The contents of both type of exts. were compared and characterized by gas chromatog./mass spectrometry work.

L21 ANSWER 69 OF 84 MEDLINE on STN
ACCESSION NUMBER: 88277507 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3393744
TITLE: [The preparation and control of **extractive** solutions of **yarrow** (Millefolii herba) for use of the preparations in medicated baths. I]. Cercetari privind prepararea si controlul unor solutii extractive din Millefolii herba in scopul realizarii de preparate pentru bai medicamentoase. Nota I.
AUTHOR: Gafitanu E; Astarastoae R; Soficu C; Matei I
SOURCE: Revista medico-chirurgicala a Societatii de Medici si Naturalisti din Iasi, (1988 Jan-Mar) 92 (1) 121-2.
Journal code: 0413735. ISSN: 0300-8738.
PUB. COUNTRY: Romania
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Romanian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198808
ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19880824

L21 ANSWER 72 OF 84 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1982:524301 CAPLUS
DOCUMENT NUMBER: 97:124301
TITLE: On the **extraction** of essential trace elements: iron, manganese, zinc, and copper from the leaves of **Achillea millefolium** L
AUTHOR(S): Zimna, Danuta; Piekos, Ryszard
CORPORATE SOURCE: Inst. Chem. Anal., Med. Acad., Gdansk, Pol.
SOURCE: Scientia Pharmaceutica (1982), 50(2), 114-20
CODEN: SCPHA4; ISSN: 0036-8709
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The kinetics of extraction of 4 essential trace elements from dried leaves of A. millefolium was studied. The elements (Fe, Mn, Zn, and Cu) were extracted

with water, 0.1 M citric acid, and 70% ethanol. Iron could only be extracted with the 0.1 M citric acid solution Mg and Zn were extracted most effectively with the 0.1 M citric acid, whereas Cu with 70% ethanol. The optimum duration of the extraction of Mn, Zn, and Cu was .apprx.30 min at 20°, regardless of the solution employed. Hot water was more effective than cold water in the extraction of Mn, Zn, and Cu.

L21 ANSWER 73 OF 84 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1982:174018 BIOSIS
DOCUMENT NUMBER: PREV198273034002; BA73:34002
TITLE: OBTAINING BIOLOGICALLY ACTIVE **EXTRACTS** FROM **YARROW ACHILLEA-MILLEFOLIUM** USING LIQUEFIED GASES.
AUTHOR(S): SHAFTAN E A [Reprint author]; MIKHAILOVA N S; DYUBAN'KOVA N F; PEKHOV A V; GOL'BERG N D
CORPORATE SOURCE: KRASNODAR RES INST FOOD IND, KRASNODAR, USSR
SOURCE: Rastitel'nye Resursy, (1981) Vol. 17, No. 1, pp. 105-109. CODEN: RRESA8. ISSN: 0033-9946.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: RUSSIAN
AB Methods of obtaining extracts from the epigeal parts of A. millefolium L. collected in Krasnodar Krai [Russian SFSR, USSR] in 1977 were studied. Liquid CO2 and khladon II were used in the extraction. The industrial processing of the epigeal parts of A. millefolium using extraction of air-dry raw material by liquid CO2 and fluoroalkanes is recommended. The CO2-extract from A. millefolium contains volatile (with water vapor) matter (13.0%), as well as anti-inflammatory matter proazulene (0.15%). The khladon extract has an enriched lipid fraction (73%) and contains proazulene (0.28%), carotenoids (0.25%), chlorophyll (0.18%) and pheophytin (0.3%). The CO2-extract and the khladon extract are sources of aromatic and biologically active matter. The CO2-extract is recommended for use as an aromatizing agent and the khladon extract in biocosmetics.

L21 ANSWER 74 OF 84 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1982:145112 BIOSIS
DOCUMENT NUMBER: PREV198273005096; BA73:5096
TITLE: USE OF SOME MEDICINAL PLANTS IN THE POST EXTRACTIONAL TREATMENT OF THE ALVEOLAR WOUND HISTOLOGICAL ASPECTS.
AUTHOR(S): PAMBUCCIAN G [Reprint author]; CONDURACHE A
CORPORATE SOURCE: DISCIPLINA MORFOPATOL, IMF BUCURESTI
SOURCE: Revista de Chirurgie Oncologie Radiologie O R L Oftalmologie Stomatologie Seria Stomatologie, (1981) Vol. 28, No. 1, pp. 61-68. CODEN: RCOSDO. ISSN: 0377-7871.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ROMANIAN
AB The range of natural products used with success in the field of stomatology is expanding. A histological study on the influence exerted by some medicinal plants with confirmed hemostatic antiinflammatory and regenerative properties on alveolar tissue, following dental extractions were studied. The patients performed postextractional washings of the buccal cavity with infusions prepared from equal amounts of Achillea millefolium, Hypericum perforatum, Plantago lanceolata and Matricaria chamomilla. The histological examination performed at various time intervals after extraction, demonstrated favorable influences exerted by the medicinal plants on the healing process of the alveolar tissue. Their use is recommended after dental extractions, for the stimulation of alveolar wound healing, and for the prevention of postextractional complications, such as, hemorrhage, postextractional alveolitis, etc.

L21 ANSWER 79 OF 84 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1977:548704 CAPLUS

DOCUMENT NUMBER: 87:148704
TITLE: Studies on the optimum conditions of **extraction** of silicon species from plants with water. VI. **Achillea millefolium** L
AUTHOR(S): Paslawska, Stefania; Piekos, Ryszard
CORPORATE SOURCE: Fac. Pharm., Med. Acad., Gdansk, Pol.
SOURCE: Acta Pharmaceutica Jugoslavica (1977), 27(2), 89-92
CODEN: APJUA8; ISSN: 0001-6667
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Influorescence and leaves of A. millefolium accumulated Si during the growth of the plant. The kinetics of extraction of molybdate-reactive Si species from the fresh and dry leaves with water were studied at 20° and 90°. The extraction rate consts. at 90° were 0.6 and 0.28 h-1 for the fresh and dry material, resp. The corresponding half-times of extraction were 98 and 150 min. The extent of extraction at 90° was 80% after 8 h for the fresh leaves and only 35% for the dry ones.

L21 ANSWER 83 OF 84 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1970:502048 CAPLUS
DOCUMENT NUMBER: 73:102048
TITLE: **Extracting** an antiinflammatory and antiirritant principle from **yarrow**
INVENTOR(S): Goldberg, Arthur; Eigen, Edward; Reeve, Lewis S.; De Salva, Salvatore; Evans, Robert Anthony; Weiss, Sidney
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3522350	A	19700728	US 1969-875593	19691110

PRIORITY APPLN. INFO.: US 1969-875593 19691110
AB The hydrolyzate from the active principle (Y), consisted of the following amino acids; cysteic acid 16.4, hydroxyproline 59.1, methionine sulfoxide 9.4, aspartic acid 130.2, threonine 49.3, serine 68.6, glutamic acid 125.4, proline 46.8, glycine 168.6, alanine 64.6, valine 50.0, cystine 49.8, methionine 20.9, isoleucine 20.9, leucine 35.4, tyrosine 10.1 phenylalanine 13.4 hydroxylysine trace, ornithine 2.3, lysine 24.1, histidine 7.1, unknown amino acid 25.0, and arginine 19.2 moles per 103 moles. Glucose, xylose, arabinose and traces of rhamnose, mannose and galactose were also present. Unrecognized peaks indicated the presence of 7 other substances in the amino acid fraction and 5 other substances in the sugar fraction. Y from Achillea millefolium (Yarrow) was isolated by extraction with H2O, precipitation with Pb(OAc)2, decomposing the precipitate with Na2CO3 and purifying.

L21 ANSWER 84 OF 84 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1934:6701 CAPLUS
DOCUMENT NUMBER: 28:6701
ORIGINAL REFERENCE NO.: 28:856e-g
TITLE: **Achillea Millefolium**, Linne. Constituents of the petroleum ether **extract** of the blossoms
AUTHOR(S): McMurray, R. L.
SOURCE: American Journal of Pharmacy (1835-1936) (1933), 105, 573-82
CODEN: AMJPA6; ISSN: 0093-4712

DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB The percentage of extractive soluble in petr. ether amounted to 2.019% with 100 lb. of air-dried, ground blossoms in a Lloyd extractor. Organic compds. isolated from this extract and not previously reported in the literature are: (a) saturated fatty acids-myristic acid, palmitic acid, undetd. acid, cerotic acid; (b) unsatd. fatty acids-linoleic acid, oleic acid; (c) saturated alc.-ceryl alc.; (d) unsatd. alc.-sterol; (e) saturated hydrocarbon-triacontane.

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